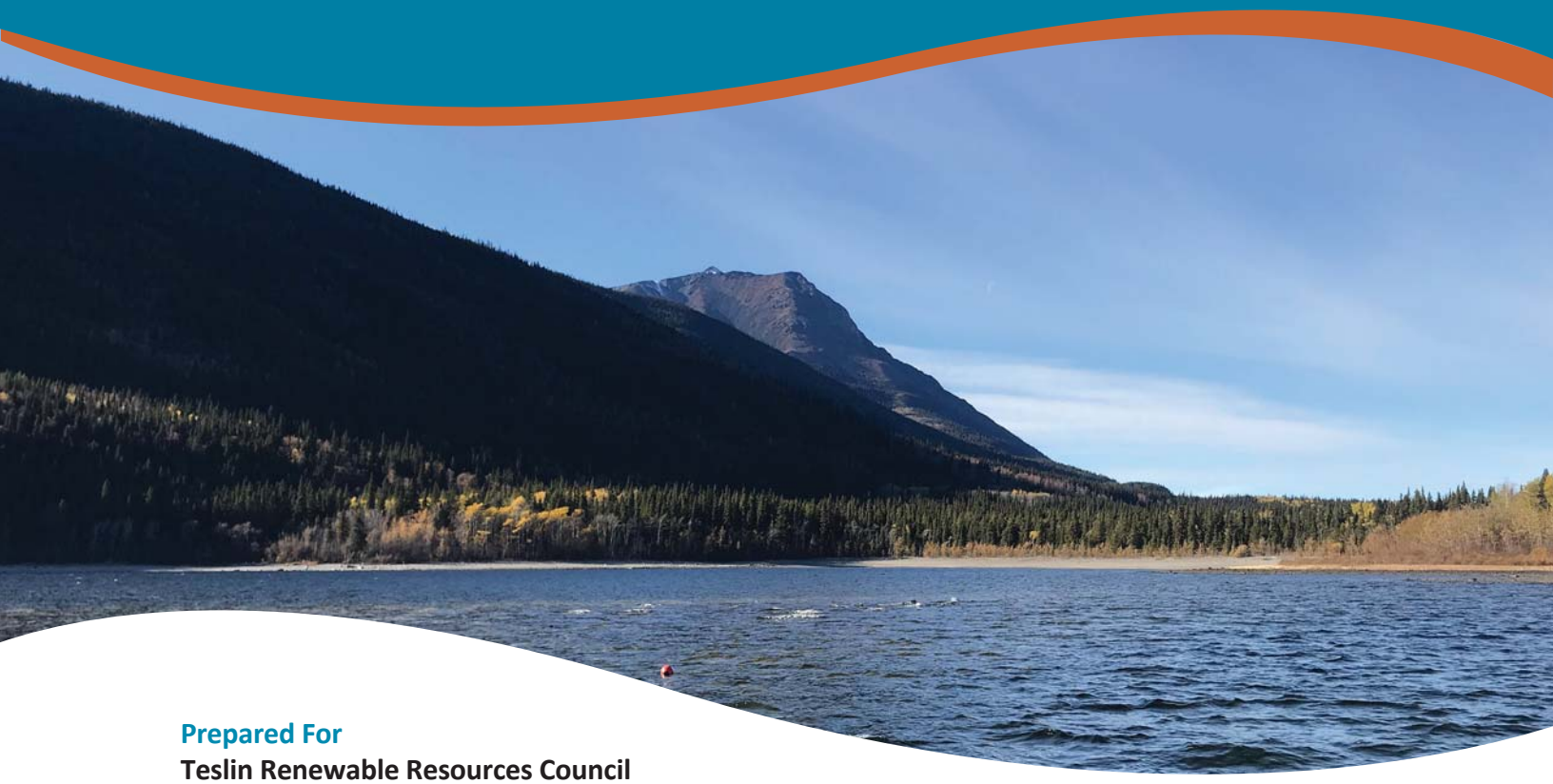
Teslin Lake Trout Spawning Site Monitoring on Teslin Lake



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18Y0198
March 2019

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EXECUTIVE SUMMARY

Teslin Lake is one of the largest lakes in the Yukon and is a transboundary waterbody with approximately half of the lake located in British Columbia. Lake trout are a highly sought-after fish species in Teslin Lake and support an important recreational and subsistence fishery. During 2016, the Teslin Renewable Resources Council and EDI developed a two-year research project to locate lake trout spawning sites in Teslin Lake, to determine the presence of geographic subpopulations through genetic analysis and to determine how the harvest in different areas of the lake was distributed amongst the subpopulations. The 2018 project was designed to build upon the knowledge and data gained in previous years and to conduct an additional year of sampling for tag recaptures to learn about lake trout movements throughout the lake and study lake trout spawning ecology including spawning site fidelity and frequency.

A total of 87 short duration net sets were completed in the evenings and early mornings of October 4 and 5, 2018 to target spawning lake trout in Teslin Lake. Very short net set durations were used to allow all fish captured to be successfully released. A total of 579 fish from five species were captured with lake trout accounting for the largest proportion of the catch (92%), followed by round whitefish (4%) and lake whitefish (3%). The capture rate of spawning lake trout was highest in the Jennings-Stormy Bay area, followed by Wilson Bay-Swift River, BC border, 10 Mile, Morley Bay and the Teslin area. As was the case during 2016 and 2017, lake trout in spawning condition were tagged with numbered Floy tags; six different colours of tags were used, each corresponding to a different geographical portion of Teslin Lake.

As of February 29, 2019, a total of 26 recaptures of tagged lake trout have been reported by recreational and subsistence fishers from tags applied during fall spawner sampling during 2016, 2017 and 2018. Lake trout tagged in all geographical areas of the lake have been recaptured and there appears to be a northward movement of individuals away from spawning areas in the southern portion of the lake. Spawners from the spawning areas at the far south of the lake (Stormy Bay) appear to make long distance migrations with a number of recaptures in the Teslin area despite the considerable distance (75 km) between these areas. Over the course of the 2017 and 2018 fall spawner sampling, a total of 44 tagged lake trout were captured on the spawning grounds, thus providing information on spawning site fidelity and spawning frequency. At all spawning areas except for one area near Teslin, the tag recaptures indicate a high degree of site fidelity with the majority of tagged lake trout recaptured within 0.5 km of the location where they were initially tagged. Tag recapture information suggests some male lake trout may spawn every year. There were no female lake trout recaptured during 2017 or 2018 which suggest that spawning may occur every three years.

ACKNOWLEDGEMENTS

The secretary and council members of the Teslin Renewable Resource Council administered the project and provided general advice on project direction. Numerous anglers and local subsistence fishers assisted with this project through the provision of tag recapture information. Gillian Rourke and James McGrath helped co-ordinate the reporting of tag recaptures from local community members. Kyle Keenan allowed the field crew to use his cabin on Teslin Lake during the fall spawner sampling during October 2018. Minnie and Jim Clark accompanied the field crew for a portion of the field work and shared with the Teslin RRC a number of high-quality photographs of the work. Funding for this project during 2018 was provided by the Yukon Fish and Wildlife Enhancement Trust Fund.

AUTHORSHIP

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1 INTRODUCTION

Teslin Lake is one of the largest lakes in the Yukon with a total surface area of 35,400 hectares, length of 120 km and average width of 2.9 km. The lake transects the Yukon/BC border with just over half of the lake located within the Yukon. Much of the lake is relatively deep (mean depth of 59 m and maximum depth of 214 m; Thompson 1997), although there are a number of areas with relatively shallow water. These shallow areas include the lake outlet, Nisutlin/Eagle Bay, Morley Bay and the 'Narrows' near the Jennings River at the far south end of the lake. The lake is fed by a number of relatively large tributaries including the Nisutlin, Morley, Gladys, Swift, Jennings and upper Teslin rivers (Map 1). There are also a number of smaller tributaries which enter the lake along its length. The community of Teslin is located along the east shore of the lake and the northern half of the lake is paralleled by the Alaska Highway.

Teslin Lake has a relatively diverse fish population compared to many other Yukon lakes with a total of 13 resident freshwater species, including several whitefish species (Table 1). Two species of salmon, Chinook and chum, migrate through the lake to spawning areas in major tributaries; during the summer months, juvenile salmon migrate downstream into the Teslin River and eventually the Yukon River. Bull trout are an uncommon species in the lake and an individual captured during the 2017 lake trout spawning surveys provided on the first confirmed records of the species in Teslin Lake (Schonewille and Costello 2018).

Table 1. Fish species assemblage in Teslin Lake[1] and associated species codes.

Species Category	Common Name	Scientific Name	Code
Freshwater Game Species [2]	Arctic grayling	*Thymallus arcticus*	GR
	lake whitefish	*Coregonus clupeaformis*	LW
	broad whitefish	*Coregonus nasus*	BW
	inconnu	*Stenodus nelma*	IN
	northern pike	*Esox lucius*	NP
	lake trout	*Salvelinus namaycush*	LT
	bull trout	*Salvelinus confluentus*	BT
	burbot	*Lota lota*	BB
Salmon Species	Chinook salmon	*Oncorhynchus tshawytscha*	CH
	chum salmon	*Oncorhynchus keta*	CM
Other Fish Species	round whitefish	*Prosopium cylindraceum*	RW
	pygmy whitefish	*Prosopium coulterii*	PW
	least cisco	*Coregonus sardinella*	LC
	slimy sculpin	*Cottus cognatus*	CCG
	longnose sucker	*Catostomus catostomus*	LSU

[1](Clemens et al. 1945), (EDI 2017), (Jessup 2011), current study.

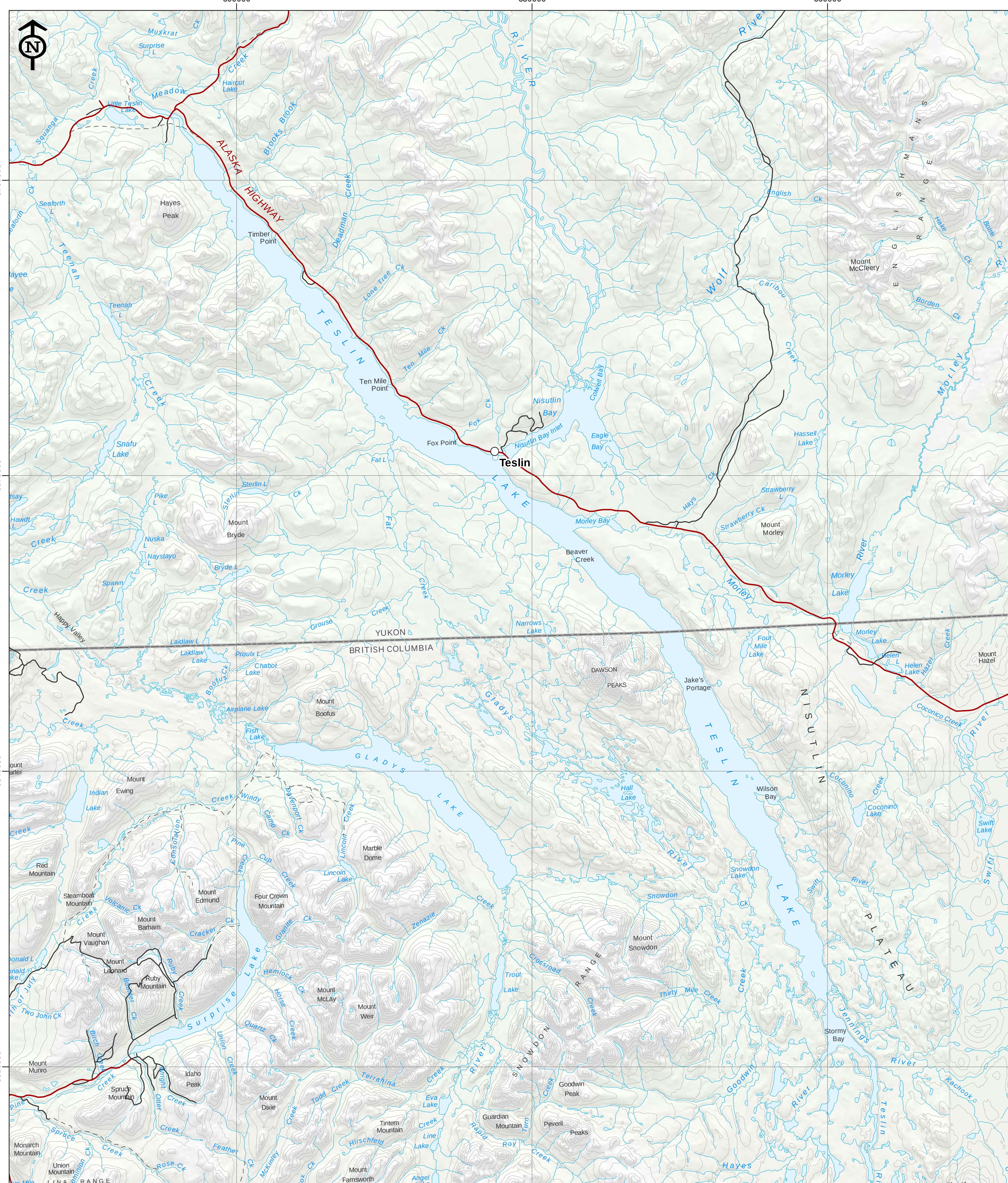
[2] Species typically targeted by recreational or subsistence fisheries.

Teslin Lake has extensive lake trout habitat, with the only access points along the north half of the lake, which is reflected in the distribution of angling effort. During a 2001 angler harvest survey (Schonewille 2001), 52% of the lake trout were captured at the area known locally as the "mudline". This area is located near the community of Teslin and receives a considerable amount of fishing pressure in early summer due to the ease of access. The area is theorized to provide an apparent feeding area for lake trout due to the influx of warm and turbid water from the Nisutlin River. During 2001, other areas in the northern portion of the lake such as Morley Bay, 10 Mile and the BC/Yukon border area each accounted for 12-18% of the lake trout captured. The BC portion of Teslin Lake does not have easy access and requires a considerable amount of travel from Teslin to be fished. Due to this relative isolation, during the 2001 survey only 5% of the lake trout were captured in this portion of the lake, although this area constitutes nearly half of the lake's total area. However, local observations indicate that fishing effort has increased in this portion of the lake in recent years due to technological advances and larger boats being present on the lake.

There is a history of concern from residents of Teslin regarding the status of lake trout stock in Teslin Lake. Beginning in 1990, the fishing regulations have gradually become more restrictive due to a combination of netting survey data and local knowledge of declining stocks. There are a number of potential reasons for the depleted lake trout stock in Teslin Lake; some of the more current issues include the relatively easy fishing access along a large portion of the lake and highly concentrated angler harvest in some of the more productive lake trout habitats. The amount of lake trout harvested in the lake has remained near sustainable levels in recent years despite more restrictive angling regulations and does not account for the subsistence harvest of lake trout which also occurs.

Previous netting surveys on Teslin Lake used a method which could only detect large changes in lake trout abundance (Jessup 2011). During 2016, the Yukon Government conducted a Summer Profundal Index Netting (SPIN; adapted from Sandstrom and Lester 2009) survey on Teslin Lake to obtain a more accurate population index. The 2016 SPIN survey captured 55 lake trout over 133 net sets resulting in an estimated absolute density of 1.8 lake trout per hectare for lake trout >300 mm. This survey indicated that Teslin Lake has a low relative density of large-bodied lake trout, lower than expected for a lake of its productivity (Lowey et al. 2018).

Map 1. Overview of Teslin Lake



Legend

- ○ Settlement/Community
- Highway
- Secondary Road
- Trail
- Yukon/British Columbia Border

Data Sources
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1.1 SUMMARY OF 2016 AND 2017 STUDIES

During 2016, the TRRC initiated the Spawning Site Identification and Mixed Stock Analysis project (the project) with the help of EDI which included the following objectives (additional information is provided in Schonewille and Costello (2018)):

- Involve local community members in a lake trout research project and solicit feedback from local fishers on project activities.
- Identify and confirm lake trout spawning areas in Teslin Lake.
- Develop a genetic baseline of lake trout to determine if there are genetically distinct subpopulations in Teslin Lake and the geographic boundaries of these subpopulations.
- Begin to collect information on lake trout spawning site fidelity, spawning frequency, and seasonal movements through tag recaptures.
- Conduct a mixed stock genetics analysis to determine the composition of harvested lake trout in terms of contributions from genetic subpopulations present in the lake.

In order to identify lake trout spawning sites and establish a genetic baseline of lake trout, beach seining was conducted during the early summer of 2016 and 2017 at suspected spawning locations based upon local knowledge and habitat characteristics. The majority of young-of-the-year lake trout captured were lethally sampled to allow for genetic analysis. Targeted small mesh gillnetting was also completed during the 2016 and 2017 spawning periods (late September to mid October) to confirm spawning locations and collect genetic samples from spawners. In addition to collecting biological data from all fish captured, all spawning lake trout were tagged with coloured Floy tags prior to being released alive. Six different coloured Floy tags were used with each representing a different geographic area of Teslin Lake.

To perform a mixed stock analysis on lake trout in Teslin Lake, it was necessary to first identify whether distinct subpopulations exist in the lake and if so, map their approximate distribution; such groups would serve as the basic population segments to which unknown fishery samples could be assigned. To do this, genetic data on 21 microsatellite loci for reference samples (from fry and spawners collected in the vicinity of suspected spawning areas), and "unknown" fishery samples, which include those submitted by anglers, subsistence fishers, and those collected through the Yukon Government's population assessment (summer profundal index netting) in 2016. Levels of genetic variation were then determined among putative spawning areas in the lake and examined how that variation is partitioned using a variety of analytical techniques.

A combined total of 251 beach seine hauls were completed throughout all areas of Teslin Lake during June 2016 and 2017, resulting in the capture of 6,409 fish across 10 species. The seining sites were chosen in an attempt to maximize lake trout fry captures and therefore included primarily exposed rocky shorelines. Lake trout were captured in all geographic areas of Teslin Lake, although only a single individual was captured in the north end of the lake. Lake trout were captured in 137 of 251 hauls (55%), with the highest proportion of hauls containing lake trout in the BC Border (82%) and Morley Bay (76%) sampling areas.

A total of 283 short duration, small mesh gillnetting sets were completed during the fall of 2016 and 2017 in the vicinity of known and suspected lake trout spawning areas throughout Teslin Lake. A total of 1,307 fish in 10 species were captured, with lake trout accounting for the largest proportion of the catch. Spawning lake trout were captured in all sampling areas of Teslin Lake except the north end. The capture rate of spawning lake trout was highest in the Jennings-Stormy Bay area during both years, followed by the BC Border and 10 Mile areas. All spawning lake trout were tagged with coloured Floy tags, totalling 754 individuals tagged during both years combined.

The project has also involved extensive involvement from local recreational and subsistence fishers on Teslin. Dozens of fishers collect genetic samples from harvested lake trout with a total of 338 samples provided during 2016 and 2017 combined. These samples were combined with additional samples provided by Environment Yukon from the 2016 SPIN and 2015 angler harvest surveys to complete the mixed stock analysis.

In addition to the research component, this project also involved a considerable amount of public outreach. To date, three public information sessions have been held in Teslin, each of which has attracted 60 to 70 locals. The project also included the construction of two multi-panel signs about the project and Teslin Lake in general. These signs were erected at the two primary access points to the lake and will provide a lasting benefit of increasing the awareness of lake trout conservation.

1.2 OBJECTIVES OF THE 2018 STUDY

The objectives of the 2018 study are as follows:

- Keep local fishers informed about ongoing lake trout research on Teslin Lake through a community presentation during late 2018 or early 2019.
- Conduct additional field sampling to recapture previously tagged lake to collect information on spawning ecology (frequency, site fidelity) and to apply additional tags to continue to learn about movements in Teslin Lake through future recaptures by fishers.
- Prepare a detailed technical report summarizing the results of the project.

2 METHODS

2.1 COMMUNITY INFORMATION SESSION

A community information session is planned to be held in Teslin in April 2019 to update community members on the results of the project and how to continue to be involved in the project during the future. The session is planned to include a presentation about the project as well as a question and answer session with attendees.

2.2 FALL SPAWNER SAMPLING

Fall spawner sampling was conducted using short set small mesh nets comprised of 52 mm (2.0 inch) and 64 mm (2.5 inch) multifilament mesh, each 22.9 m in length. Nets were comprised of two of these combined panels. Set durations were kept to less than one hour; however, many sets in areas with high fish captures were considerably less and often less than 15 minutes. The short set durations were used to ensure that the captured lake trout were in good condition upon release. Sets were conducted in the evening and early morning hours (20:00 to 05:00) since lake trout are nocturnal spawners (McPhail 2007).

A total of 87 short duration net sets were completed during a single sampling event on October 4 and 5, 2018 The same seven sampling areas used to stratify the sampling sites during 2016 and 2017 were once again used to provide a comparison of spawning lake trout captures throughout the lake (Table 2; Map 2). Information collected for each gillnet set included: GPS coordinates of both net ends, water depth at both ends of the net, number of panels/net length, set location (shore/offshore), time set, time pulled, surface water temperature, and weather/wind conditions.

All fish captured were identified to species and measured to fork length (mm). Fish were removed from the net as quickly as possible and placed in a large capacity livewell with constantly recirculating lake water. A small piece of the adipose fin (genetic sample) was collected from each lake trout captured and the sample was stored in a pre-labelled 5 mL plastic vial containing 95% ethanol. Sex and maturity (spawner/non-spawner) were determined for all lake trout captured based upon the presence of a protruding ovipositor (females) or milt discharge (males). Lake trout captured which were in spawning condition were also tagged with a numbered Floy tag. Six different colours of Floy tags were used according to sampling area (Table 2) and all tags contained a unique identifier number. The tags were inserted into the dorsal rays at the base of the dorsal fin at a 45° angle to the fish's back. Digital photographs referenced to individual fish were collected for a number of captured lake trout when fish capture volumes and weather conditions allowed. All non-target species were released immediately after being identified to species and measured.

Table 2. Summary of Teslin Lake gill netting effort during 2018.

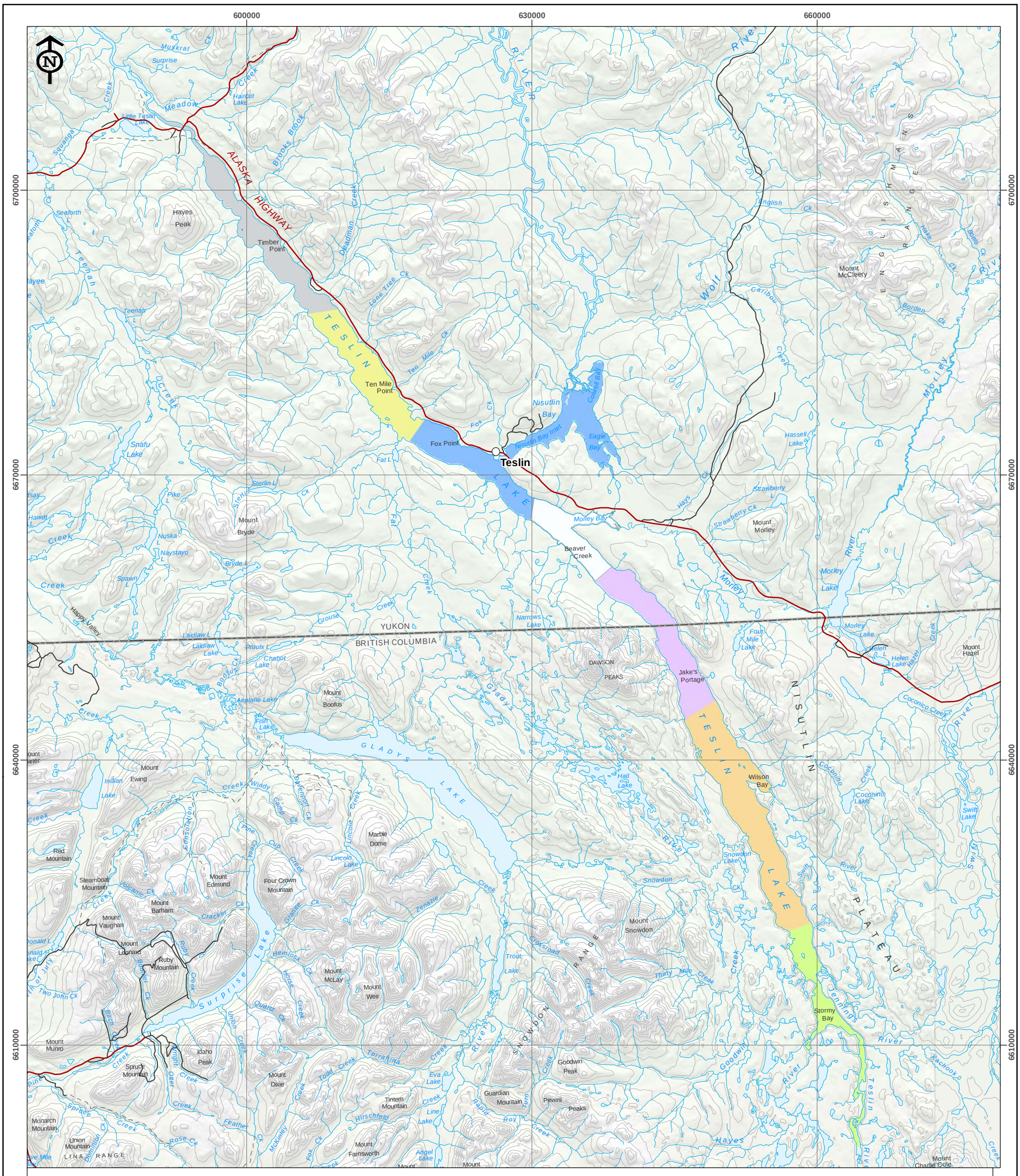
Sampling Area	Floy Tag Color	Number of Net Sets
		October 4-5, 2018
North End	N/A	-
10 Mile	Yellow	20
Teslin	Blue	7
Morley Bay	White	19
BC Border	Purple	16
Wilson Bay-Swift	Orange	21
Jennings-Stormy Bay	Green	4
ALL AREAS	-	87

2.3 TAG RECAPTURES

There are two forms and purposes of tag recaptures derived from this project: (1) recaptures of recreational/subsistence fishers which provide information on lake trout movements away from spawning areas where the tags were initially deployed; and (2) recaptures of spawning lake trout during the spawning period which provide information on spawning frequency, site fidelity and potentially, spawning population size. In addition to the tag recaptures reported on during this report, tagged lake trout will continue to be captured over time and with additional years of data will provide information on seasonal movements of lake trout throughout Teslin Lake.

Tag recaptures from recreational/subsistence fishers were encouraged through a number of different avenues by the Teslin Renewable Resource Council and Teslin Tlingit Council. The tags themselves also have a phone number listed which likely increased the number of tag recaptures reported, particularly by non-resident fishers. When reporting tag recaptures, fishers were requested to provide the following information: name of the fisher, date, location, tag colour/number, capture method, and the fate of the fish (kept or released). In some cases, only partial information was made available at the time of reporting.

During the 2018 fall spawner sampling, a number of previously tagged lake trout were recaptured. Previously tagged fish were processed in the same manner as untagged fish with consistent information collected (see Section 2.2). Analysis of the tag recapture data was done to determine the distance between the tag and recapture locations in addition to the time period (years) between capture events.



Legend

Tagging Areas

- North End
- 10 Mile
- Teslin
- Morley Bay
- BC Border
- Wilson Bay
- Jennings River/Stormy Bay

Map 1. Overview of Teslin Lake

Data Sources
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3 RESULTS AND DISCUSSION

3.1 FALL SPAWNER SAMPLING

During 2018, a total of 87 short duration, small mesh gillnetting sets were completed in the vicinity of known and suspected lake trout spawning sites throughout all portions of Teslin Lake. A total of 579 fish of five species were captured with lake trout accounting for the largest proportion of the catch (92%), followed by round whitefish (4%) and lake whitefish (3%; APPENDIX A). Due to the very short set durations used, incidental mortalities were limited to a single lake trout, with the vast majority of fish captured released in excellent condition.

Table 3. Gill netting catch during October 2018.

Fish Species Captured		Number of Fish Captured						
	North End	10 Mile	Teslin	Morley Bay	BC Border	Wilson Bay- Swift	Jennings-Stormy Bay	ALL AREAS
Burbot	-	-	-	-	-	1	-	1
Longnose Sucker	-	-	-	2	-	1	-	3
Lake Trout	-	84	2	27	167	158	95	533
Lake Whitefish	-	6	-	3	6	5	-	20
Round Whitefish	-	3	3	5	6	5	-	22
Number of Sets	-	20	7	19	16	21	4	87
ALL SPECIES	-	90	5	37	179	170	95	579

Lake trout were captured in all sampling areas of Teslin Lake with the exception of the north end where no sets were completed during 2018. This is attributed to the limited amount of suitable spawning habitat in this portion of the lake which does not have any suitable offshore islands/reefs or shorelines for spawning. The mean catch per unit effort (CPUE) was highest in the Jennings-Stormy Bay, consistent with previous years, followed by the Wilson Bay-Swift River and BC Border areas (Table 4). A considerable number of the gillnet sets had zero lake trout captured; this can be attributed to the short set durations and the set locations which were chosen to identify and delineate the spawning areas. In 2017, gillnetting locations were stratified into 26 assumed spawning areas and in 2018, 18 of these sites were sampled in addition to a new area not previously sampled[1]. Density of spawners at the spawning sites was very similar during 2018 as compared to 2017; however, one new spawning site (over 25 spawners/hour) was found on a small offshore reef in the Wilson Bay-Swift area.

[1] Specific gillnetting locations and lake trout captures by site are excluded due to the potentially sensitive nature of this information.

Table 4. Gill netting effort and lake trout catch rates during October 2018.

Area	Sample Size (No. of sets)	Total Sets with Lake Trout Captured	Total Lake Trout Captured	Catch Per Unit Effort (Number/hr)		
				Mean	Median	Range
North End	0	-	-	-	-	-
10 Mile	20	15	84	15.1	7.8	0.0 – 65.6
Teslin	7	1	2	0.9	0.0	0.0 – 6.5
Morley Bay	19	16	27	3.6	3.0	0.0 – 24.1
BC Border	16	15	167	18.6	3.5	0.0 – 139.1
Wilson Bay-Swift	21	19	158	23.4	18.8	0.0 – 96.0
Jennings-Stormy Bay	4	4	95	83.4	64.0	31.2 – 174.3
ALL AREAS	87	70	533	22.8	4.2	0.0 – 174.3

Of the 533 lake trout captured, all but one individual were ripe spawners based upon a rapid assessment of maturity and sex. All spawning lake trout were tagged with different coloured Floy tags applied in each sampling area (refer to Section 2.2). Combined with 2016 and 2017, there are now a total of 993 tagged lake trout in Teslin Lake; this total accounts for tagged individuals retained by recreational and subsistence fishers to date. These tagged individuals will continue to be recaptured for many years to come and will continue to provide information on lake trout movements throughout Teslin Lake.

Lake trout fork length ranged from 310 to 895 mm with a mean length of 568 mm (Table 5, Figure 1). Males dominated the captures in all sampling areas and constituted over 88% of all lake trout captured in 2018, similar to 2017 where males accounted for 80% of the catch (Schonewille and Costello 2018). The Jennings-Stormy Bay area had the lowest proportion of males captured (73.69%). This may be due to the timing of the sampling; for example, knowledge gained over a period of three years at Mayo Lake in the central Yukon found that males were typically more prolific on the spawning grounds and may be found on the spawning sites up to three weeks prior to peak spawning activity (EDI 2014b).

Table 5. Lake trout captures during the 2018 Teslin Lake fall spawner sampling.

Area	Total Lake Trout Spawners Captured	Proportion of Males Captured (%)	Fork Lengths (mm)			
			Mean	Median	Minimum	Maximum
North End	-	-	-	-	-	-
10 Mile	84	88	616	614	435	865
Teslin	2	100	717	-	568	865
Morley Bay	27	82	564	604	430	741
BC Border	167	94	564	572	310	895
Wilson Bay-Swift	158	92	550	552	235	746
Jennings-Stormy Bay	95	74	568	575	473	640
ALL AREAS	533	88	568	573	310	895

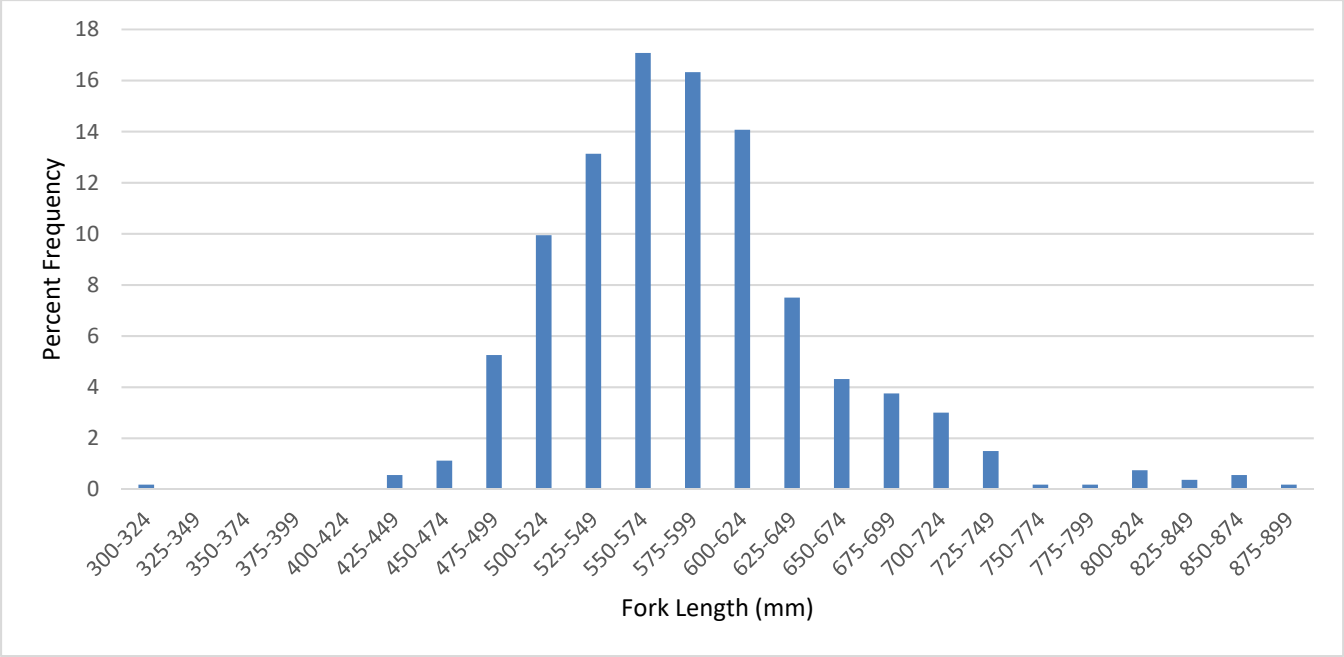

Figure 1. Length frequency histogram of lake trout spawners captured during 2018 (n = 533).

3.2 TAG RECAPTURES

Recaptures of tagged lake trout by fishers on Teslin Lake provide information on movement patterns and provide an opportunity for local and visiting fishers to be involved in this component of the research project. As of February 2019, a total of 26 tagged lake trout have been recaptured in Teslin Lake by a combination of recreational and subsistence (gillnetting) fishers (Table 6; Map 3 – Map 8). The majority of the tag recaptures showed a northward movement, particularly from Stormy Bay and the BC Border to the area between Morley Bay and the Teslin area. However, it is important to note that the amount of lake trout captured in this portion of the lake is likely disproportionate to the whole lake; therefore, this finding should be considered with caution. The only tag recoveries which showed a southward movement were individuals tagged near 10 Mile (yellow tag) and recaptured near Teslin (mudline) and the BC Border area.

The movement of tagged individuals from Stormy Bay north to the Teslin area is of note given the distance between these locations (75 km), and this finding may illustrate the importance of the area known locally as the "mudline" to lake trout in Teslin Lake. Despite the lack of confirmed lake trout spawning in the north end of the lake, tagged lake trout have been captured in this area from individuals tagged at spawning sites in the 10 Mile and BC Border areas.

Table 6. Summary of tag recaptures by Teslin Lake recreational and subsistence fishers up to and including February 2019.

Area – Colour	Tag Number	Date Tagged	Recaptured	
			Location	Date
10 Mile – yellow	0048	2 Oct 16	Teslin (mudline)	7 Jun 2018
	0094	3 Oct 17	Cottage Lots	15 Feb 2019
	0139	11 Oct 17	Teslin (mudline)	8 Jun 2018
	N/A	-	BC Border	15 Jul 2017
	N/A	-	Brooks Brook	21 Jun 2018
Teslin – blue	1008	30 Sep 16	Teslin	2 Apr 2017
	1009	30 Sep 16	Teslin (mudline)	15 Jun 2018
	1020	3 Oct 16	Cottage Lots	30 Apr 2017
	N/A	-	Teslin	31 Mar 2018
Morley Bay – white	2103	30 Sep 16	Teslin (mudline)	8 Jun 2018
	N/A	-	Lone Tree Creek	10 Sep 2018
BC Border – purple	3060	4 Oct 16	Morley Bay	12 Jul 2017
	3130	2 Oct 2017	Teslin	13 Jan 2019
	3167	3 Oct 2017	Teslin	18 Jan 2018
	3177	3 Oct 2017	Teslin	6 Jan 2018
	3234	14 Oct 2017	Brooks Brook	29 Jul 2018
	N/A	-	Fox Point	10 Jul 2018
Wilson Bay/Swift – orange	4001	28 Sep 2016	Teslin	7 Jul 2018
	4032	2 Oct 2017	Big Island (10 Mile)	10 Jul 2018
Jennings/Stormy Bay – green	5024	28 Sep 2016	Beaver Creek	29 May 2017
	5035	3 Oct 2016	Morley Bay	6 Jul 2018
	5047	3 Oct 2016	Stormy Bay	4 Jul 2017
	5062	3 Oct 2016	Teslin	3 Jul 2017
	5084	1 Oct 2017	Teslin	21 Jun 2018
	5145	14 Oct 2017	Cottage Lots	5 Apr 2018
	N/A	-	Teslin (mudline)	5 Jun 2017

600000 630000 660000

6700000 6670000 6640000 6610000

Teslin

YUKON
BRITISH COLUMBIA

Legend

Recapture Location

Tagging Area

10 Mile

General Travel of Tagged Lake Trout

Travel from 10 Mile Area

Map 3. Movements of tagged lake trout from the 10 Mile area as indicated by recreational/subsistence fishery recaptures during 2018

Data Sources
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Tagging Areas and lake trout travel routes created by EDI Environmental Dynamics Inc.

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Map Projection: NAD 1983 UTM Zone 8N

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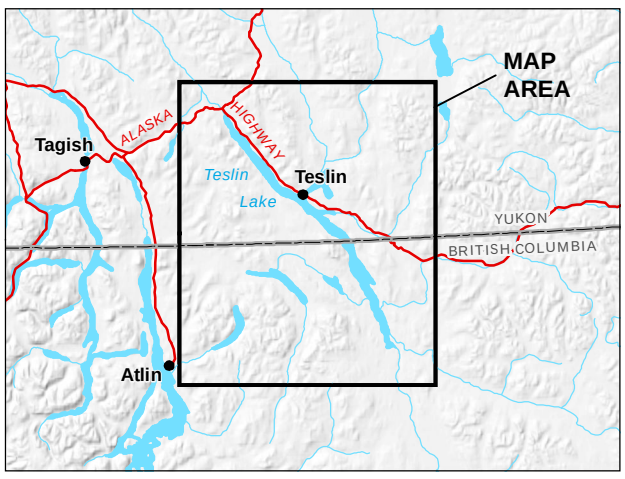

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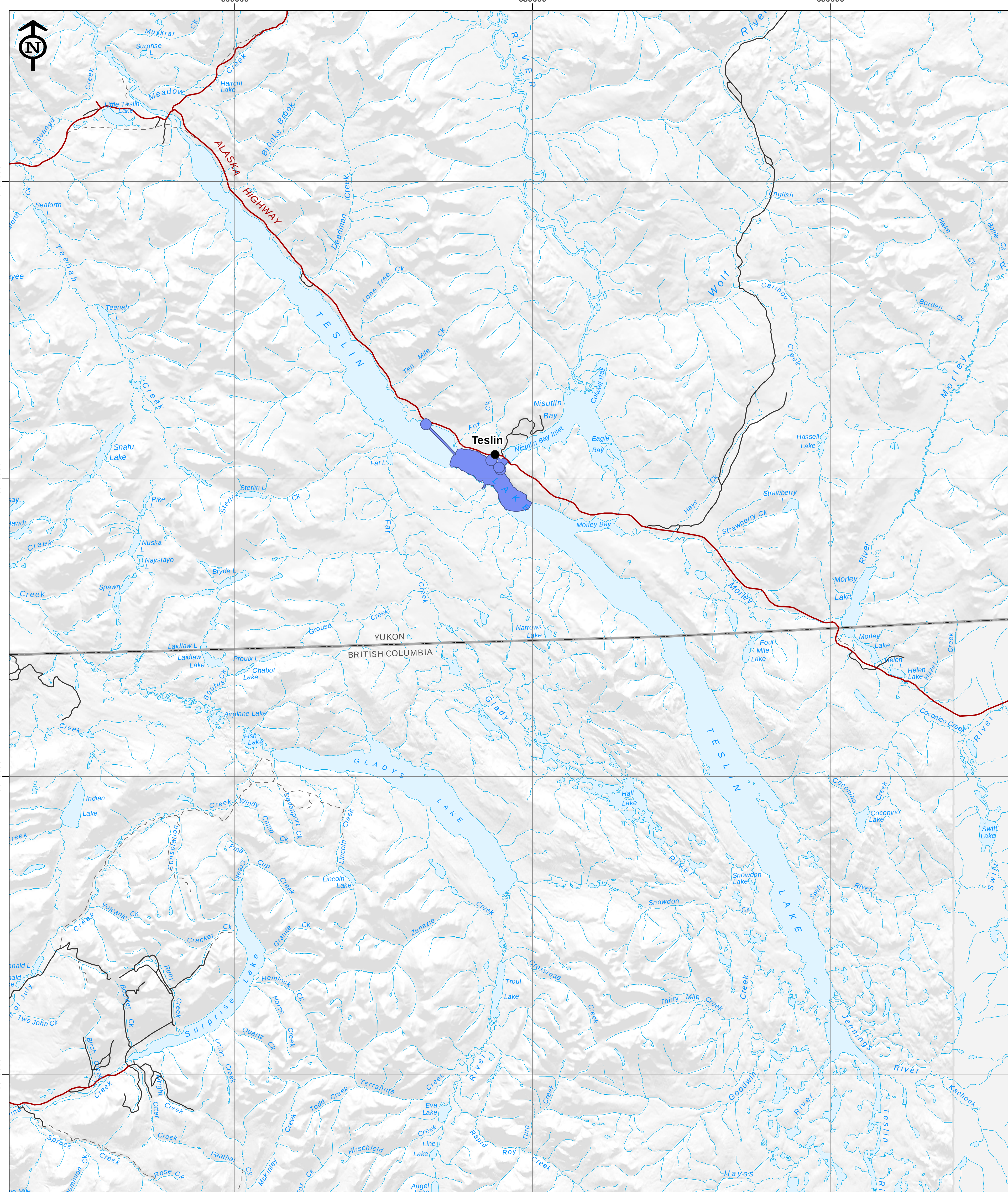
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ALASKA HIGHWAY
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Nisutlin Bay Inlet
Colwell Bay
Eagle Bay
Morley Bay
Fox
Fat L
Ten Mile Ck
Lone Tree Ck
Deadman Creek
Brooks Brook
Haircut Lake
Meadow Creek
Little Teslin Lake
Muskrat Ck
Surprise L
Squanga
Seaforth L
Teenah
Teenah L
Snafu Lake
Sterlin L
Pike L
Nuska L
Naystayo L
Bryde L
Spawn L
Wolf River
English Ck
Caribou Creek
Hays Ck
Strawberry L
Strawberry Ck
Hassell Lake
Hake Ck
Bottle Ck
Borden Ck
Morley River
Morley Lake
Morley
Four Mile Lake
Helen L
Helen Lake
Hazel
Coconico Creek
Narrows Lake
YUKON
BRITISH COLUMBIA
Grouse
Laidlaw L
Laidlaw Lake
Proulx L
Chabot Lake
Boofus Ck
Airplane Lake
Fish Lake
Gladys
GLADYS LAKE
Indian Lake
Windy
Davenport Ck
Camp Ck
Consolation
Pine Creek
Cup Creek
Lincoln Creek
Lincoln Lake
Volcanic Ck
Cracker Ck
Granite Ck
Zenazie
Ruby Creek
Boulder Ck
Two John Ck
Birch Creek
Surprise Lake
Hemlock Ck
Horse Creek
Quartz Ck
Union Creek
Wright
Otter Creek
Spruce Creek
Dominion Ck
Rose Ck
Feather Ck
McKinley
Fox Ck
Todd Creek
Terrahina Creek
Eva Lake
Line Lake
Hirschfeld
Angel Lake
Rapid
Roy Creek
Turn
Trout Lake
Crossroad Creek
Hall Lake
River
Snowdon
Snowdon Lake
Thirty Mile Creek
Swift
Swift Lake
Coconino Creek
Coconino Lake
Jennings River
Goodwin River
Teslin River
Kachook
Hayes

Legend

Recapture Location

Tagging Area

Teslin

General Travel of Tagged Lake Trout

Travel from Teslin

Map 4. Movements of tagged lake trout from the Teslin area as indicated by recreational/subsistence fishery recaptures during 2018

Data Sources
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Tagging Areas and lake trout travel routes created by EDI Environmental Dynamics Inc.

Disclaimer
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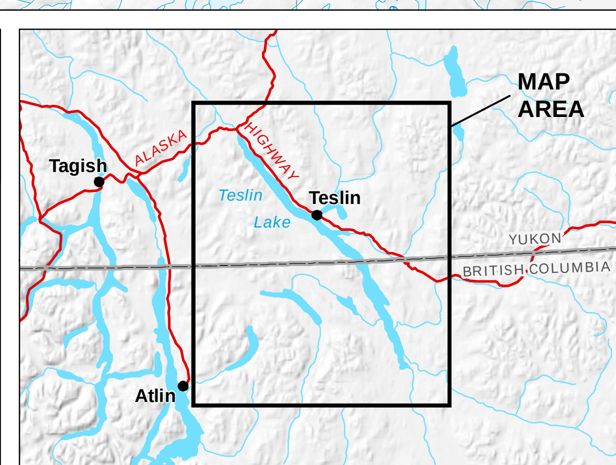
Map Scale 1:400,000 (printed on 11 x 17)
Map Projection: NAD 1983 UTM Zone 8N

Drawn: HG	Checked: BSc	Date: 2019-03-13



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Teslin

YUKON
BRITISH COLUMBIA

Legend

Recapture Location

Tagging Area

Morley Bay

General Travel of Tagged Lake Trout

Travel from Morley Bay

Map 5. Movements of tagged lake trout from the Morley Bay area as indicated by recreational/subsistence fishery recaptures during 2018

Data Sources
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Map Projection: NAD 1983 UTM Zone 8N

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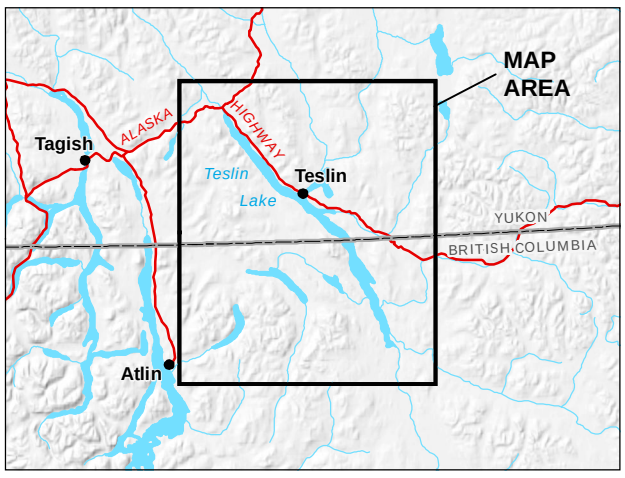
HG	BSc	2019-03-13



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Teslin

ALASKA HIGHWAY

TESLIN LAKE

GLADYS LAKE

YUKON

BRITISH COLUMBIA

Legend

- Recapture Location

Tagging Area

- BC Border

General Travel of Tagged Lake Trout

- Travel from BC Border Area

Map 6. Movements of tagged lake trout from the British Columbia border area as indicated by recreational/subsistence fishery recaptures during 2018

Data Sources
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Tagging Areas and lake trout travel routes created by EDI Environmental Dynamics Inc.

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Map Scale 1:400,000 (printed on 11 x 17)
Map Projection: NAD 1983 UTM Zone 8N

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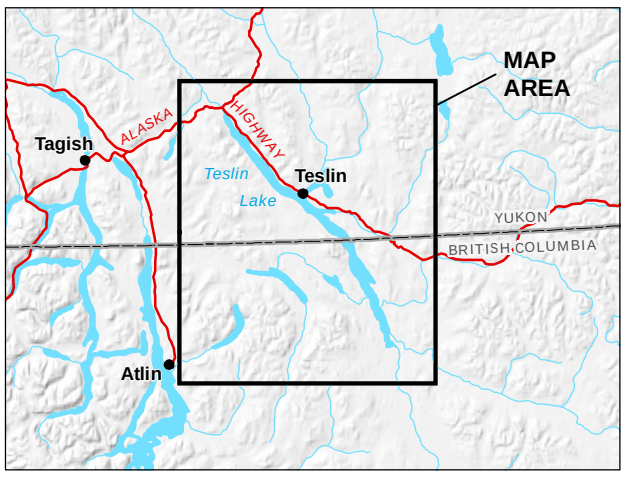
HG	BSc	2019-03-13



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6700000 6670000 6640000 6610000

Teslin

YUKON
BRITISH COLUMBIA

Legend

Recapture Location

Tagging Area

Wilson Bay

General Travel of Tagged Lake Trout

Travel from Wilson Bay Area

Map 7. Movements of tagged lake trout from the Wilson Bay area as indicated by recreational/subsistence fishery recaptures during 2018

Data Sources
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Tagging Areas and lake trout travel routes created by EDI Environmental Dynamics Inc.

Disclaimer
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Map Scale 1:400,000 (printed on 11 x 17)
Map Projection: NAD 1983 UTM Zone 8N

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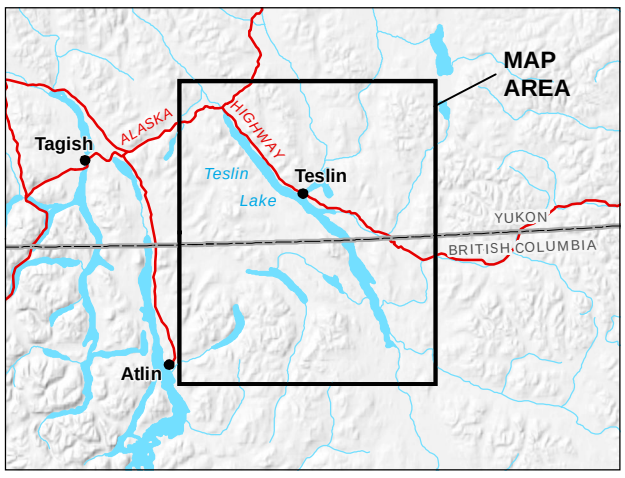

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Teslin

YUKON
BRITISH COLUMBIA

Legend

Recapture Location

Tagging Area

Jennings River/Stormy Bay

General Travel of Tagged Lake Trout

Travel from Jennings/Stormy Bay

Map 8. Movements of tagged lake trout from the Jennings River/Stormy Bay area as indicated by recreational/subsistence fishery recaptures during 2018

Data Sources
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Tagging Areas and lake trout travel routes created by EDI Environmental Dynamics Inc.

Disclaimer
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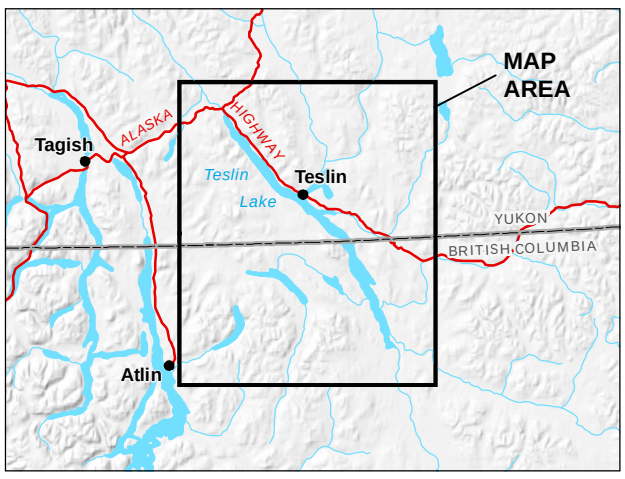
Map Scale 1:400,000 (printed on 11 x 17)
Map Projection: NAD 1983 UTM Zone 8N

Drawn:	Checked:	Date:
HG	BSc	2019-03-13



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In addition to the tag recaptures by recreational and subsistence fishers, a number of tags were recaptured by field crews conducting the 2018 fall spawner sampling (n=29) which included 17 individuals tagged during 2016 and 12 tagged during 2017 (Table 7). During the 2017 field sampling, an additional 15 tags were recaptured after initially being tagged during 2016. The highest proportion of tags were captured in the 10 Mile and Teslin areas and the lowest number in Stormy Bay and the BC border areas. These findings suggest that the population sizes in the areas with more recaptures may be smaller and those with fewer recaptures are likely larger. Lake trout do not spawn every year and therefore it is not practical to use these results as a means of estimating spawner population size. The results of the 2017 genetic analysis (Schonewille and Costello 2018) indicated that the effective population size in the 10 Mile and Teslin spawning areas are relatively small and this appears to be supported by the relatively high proportion of tag recaptures in these areas. Conversely, the spawning sites in the Stormy Bay and BC border areas appeared to have a relatively high effective population size which also supports the low number of recaptures in these areas.

Table 7. Summary of tag recaptures during the 2017 and 2018 fall spawner sampling.

Area – Colour	2016 Tags			2017 Tags		TOTALS		
	Number of Tags Applied	Recaptured		Number of Tags Applied	Recaptured	Number of Tags Applied	Recaptures	
		2017	2018		2018		Number	Proportion (%)
10 Mile – yellow	71	5	9	86	6	157	20	12.7
Teslin – blue	20	5	1	28	-	48	6	12.5
Morley Bay – white	21	3	-	52	1	73	4	5.5
BC Border – purple	92	1	3	155	4	247	8	3.2
Wilson Bay – orange	29	1	2	18	-	47	3	6.4
Stormy Bay – green	60	-	2	85	1	145	3	2.1
ALL AREAS	293	15	17	424	12	717	44	6.1

Lake trout are suspected to exhibit spawning site fidelity (returning to the same location to spawn) and this is what results in the geographical separation of subpopulation within the lake as confirmed during the 2017 genetics analysis. Binder et al. (2016) found that site fidelity estimates were high (average of 84%) for lake trout detected in years following the initial tagging event. Considering the 44 tag recaptures in Teslin Lake during 2017 and 2018, the majority (73%) showed a high degree of site fidelity being recaptured within 0.5 km of the initial tagging location. Among the larger movements between capture events, there were two individuals in the 10 Mile area which were recaptured at a separate spawning shoal approximately 2.5 km away from the initial tagging location. The remaining ten longer distance recaptures were all located within the Teslin/Morley Bay area where tags were recaptured as much as 6.5 km away from the initial tagging location. These findings are notable given that the result of the 2017 genetics analysis (Schonewille and Costello 2018) indicated that this portion of the lake represents a transition between geographic subpopulations present in the lake. All of the tags recaptured on the east shore of the lake in the Teslin area were located a considerably distance away from the initial tagging location; this included four tags with a range of 2.0 to 6.4 km and an average of 3.9 km. These findings, combined with the results of the genetics analysis, suggest a relatively low degree of spawning site fidelity at spawning sites in the Teslin area.

The spawning period tag recaptures also provide information on spawning frequency by lake trout in Teslin Lake. Lake trout in northern lakes known to skip at least one year between spawning events and females are

expected to have a higher likelihood of skipped spawning due to the energetic needs require for gonad development (Morbey and Shuter 2013). All of the 44 tag recaptures in Teslin Lake during 2017 and 2018 were males, despite 16 % of the tags being applied to females. These findings suggest that female lake trout in Teslin Lake may skip two years between spawning and therefore may spawn every three years, although this could not be confirmed without an additional one or two years of recapture events. Among the males recaptured, there was a high proportion of individuals recaptured two years after tagging as compared to one year after tagging. These results are consistent with the monitoring of lake trout spawning at Mayo Lake in the central Yukon where tag recaptures indicate that males appeared to spawn every one to three years with the only females recaptured three years after the initial tagging event (EDI 2014b).

4 CONCLUSIONS

Tag recoveries and spawning site monitoring in Teslin Lake during 2018 have confirmed the following:

- Tag recaptures by Teslin Lake fishers have confirmed redistribution of mature lake trout throughout the lake outside of the spawning period. The lake trout spawning near the far south end of the lake (Jennings-Stormy Bay) appear to make extensive movements throughout the lake as indicated by a relatively high proportion of recaptures.

- All but one of the spawning areas (in the Teslin area) appear to have a high degree of site fidelity within a number of tags recaptured during the spawning period within 0.5 km of the initial tagging location.

- Tag recaptures on the spawning grounds indicate that some males may spawn every year. No tagged females were captured, thus indicating that spawning may occur every 3 years (or more).

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APPENDIX A. FALL SPAWNING SAMPLING DATA

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Table A1. 2018 fall spawning sampling summary data.

Sample Area	Set Time	Pull Time	Duration (hours)	Net Length (m)	Depth In (m)	Depth Out (m)	Water Temp. (°C)	No Fish Captured	Burbot	Longnose Sucker	Lake Trout	Lake Whitefish	Round Whitefish
Jennings-Stormy Bay	20:18	20:45	0.45	45.2	0	13.8	7.99				14		
Jennings-Stormy Bay	20:37	21:08	0.52	45.2	0	13.6	8.5				21		
Jennings-Stormy Bay	21:47	21:57	0.17	45.2	0	18.9	8.12				29		
Jennings-Stormy Bay	22:10	22:31	0.35	45.2	0	19.9	8.07				31		
Wilson Bay-Swift River	23:49	00:00	0.18	45.2	2.5	1.8	7.15				4		
Wilson Bay-Swift River	23:55	00:14	0.32	45.2	1.1	4.5	6.88		1		30		
Wilson Bay-Swift River	00:04	00:37	0.54	45.2	1.2	2.2	6.69				13		1
Wilson Bay-Swift River	01:10	01:25	0.24	45.2	1.8	1.7	6.77				7		
Wilson Bay-Swift River	01:15	01:32	0.29	45.2	1.4	4.2	6.77				1		1
Wilson Bay-Swift River	20:06	20:29	0.39	45.2	0	5.7	6.85					1	
Wilson Bay-Swift River	20:11	20:34	0.38	45.2	0.5	7	6.82			1		1	
Wilson Bay-Swift River	20:23	20:40	0.29	45.2	1	8.9	6.88				6		
Wilson Bay-Swift River	20:44	20:59	0.25	45.2	1	7	6.94				1		
Wilson Bay-Swift River	20:51	21:07	0.27	45.2	0	5	6.88	NFC					
Wilson Bay-Swift River	21:20	21:37	0.28	45.2	1	5.1	6.89				1	2	1
Wilson Bay-Swift River	21:24	21:50	0.43	45.2	1	2.2	6.79				12		
Wilson Bay-Swift River	21:44	22:08	0.40	45.2	0.8	2.2	6.77				1		
Wilson Bay-Swift River	21:56	22:19	0.37	45.2	1	1.6	6.61				7		
Wilson Bay-Swift River	22:15	22:33	0.30	45.2	1.3	4.3	6.59				6		
Wilson Bay-Swift River	22:24	22:45	0.34	45.2	1.2	1.3	6.62				6		
Wilson Bay-Swift River	22:39	22:55	0.26	45.2	1.4	2.4	6.51				8		
Wilson Bay-Swift River	23:16	23:31	0.27	45.2	1	4	6.58				4	1	2
Wilson Bay-Swift River	23:20	23:37	0.28	45.2	1.5	3.7	6.55				3	1	
Wilson Bay-Swift River	23:25	23:46	0.34	45.2	1.4	4.1	6.29				33		
Wilson Bay-Swift River	00:00	00:17	0.28	45.2	1.4	2	6.37				14		
BC Border	00:50	01:25	0.57	45.2	2	3.1	7.05				3		

Sample Area	Set Time	Pull Time	Duration (hours)	Net Length (m)	Depth In (m)	Depth Out (m)	Water Temp. (°C)	No Fish Captured	Burbot	Longnose Sucker	Lake Trout	Lake Whitefish	Round Whitefish
BC Border	00:55	01:38	0.72	45.2	1	8.6	7.09				1		
BC Border	01:01	01:52	0.86	45.2	1.4	2.1	7.19				1	1	2
BC Border	01:30	02:09	0.64	45.2	1.5	2.9	6.95				2		
BC Border	02:29	02:41	0.19	45.2	1.1	2.4	7.52				27		
BC Border	03:09	03:20	0.18	45.2	1.6	2.8	7.37				4		
BC Border	03:28	03:42	0.23	45.2	1.5	4.2	7.76				26		1
BC Border	04:13	04:24	0.18	45.2	1.5	4.4	7.46				23	1	
BC Border	04:38	04:50	0.21	45.2	1	3.5	7.45				17	2	
Morley Bay	20:10	20:28	0.30	45.2	2	2.7	7.95	NFC					
Morley Bay	20:18	20:38	0.33	45.2	0.5	10	7.79			1	3		
Morley Bay	20:23	20:54	0.52	45.2	1	15	7.78				2		
Morley Bay	20:35	21:05	0.50	45.2	1.1	13.5	7.79				1	1	
Morley Bay	20:51	21:13	0.37	45.2	1	5.1	7.76						1
Morley Bay	21:02	21:20	0.29	45.2	0.5	10.6	7.77				1		
Morley Bay	21:34	21:55	0.36	45.2	0	10	7.71				2		
Morley Bay	21:38	22:03	0.42	45.2	1	7.9	7.6				1		1
Morley Bay	21:42	22:10	0.47	45.2	0.8	6.3	7.51				2		
Morley Bay	22:00	22:23	0.39	45.2	0	7	7.31	NFC					
Morley Bay	22:15	22:28	0.22	45.2	0.8	4.4	7.23						1
Morley Bay	22:40	22:56	0.25	45.2	1.1	3	7.42					2	
Morley Bay	22:45	23:00	0.26	45.2	2.5	3	7.44						1
Morley Bay	22:51	23:06	0.24	45.2	1	2.3	7.46	NFC					
Morley Bay	23:19	23:44	0.42	45.2	1.2	13	7.57				10		
Morley Bay	23:28	00:01	0.54	45.2	1	3	7.57				2		
Morley Bay	00:15	00:30	0.25	45.2	1	4	7.71				1		
Morley Bay	00:21	00:41	0.33	45.2	0.5	8	7.52				1		1
Morley Bay	00:36	00:56	0.33	45.2	1	18	7.6			1	1		

Sample Area	Set Time	Pull Time	Duration (hours)	Net Length (m)	Depth In (m)	Depth Out (m)	Water Temp. (°C)	No Fish Captured	Burbot	Longnose Sucker	Lake Trout	Lake Whitefish	Round Whitefish
BC Border	01:12	01:34	0.36	45.2	1	6.1	7.53					1	1
BC Border	01:16	01:39	0.38	45.2	1	9.5	7.4				1		2
BC Border	01:21	01:46	0.42	45.2	0.4	8.5	7.36				1	1	
BC Border	02:05	02:18	0.21	45.2	1.5	4.1	6.95				24		
BC Border	02:57	03:08	0.18	45.2	1.4	3.8	7.07				15		
BC Border	03:20	03:38	0.30	45.2	1.8	2.3	6.69				15		
BC Border	04:02	04:16	0.23	45.2	1.3	3.9	7.9				7		
10 Mile	20:10	20:24	0.24	45.2	1	9	7.72				3		
10 Mile	20:28	20:43	0.25	45.2	1	15	8	NFC					
10 Mile	20:36	20:52	0.25	45.2	1	8.8	7.98				2		
10 Mile	20:48	21:08	0.33	45.2	1	10.7	7.99				3		
10 Mile	21:04	21:25	0.35	45.2	0	13.7	7.82				1		
10 Mile	21:24	21:42	0.31	45.2	0	9.8	7.91	NFC					
10 Mile	21:31	21:47	0.26	45.2	4	7.4	7.94	NFC					
10 Mile	22:03	22:18	0.25	45.2	0.5	9.1	7.68	NFC					
10 Mile	22:29	22:46	0.29	45.2	0.5	10.1	7.71				3		1
10 Mile	22:29	22:46	0.29	45.2	0.5	10.1	7.71						
10 Mile	22:32	22:55	0.38	45.2	1	8	7.75				14		1
10 Mile	22:36	23:08	0.52	45.2	1	8.2	7.75				2		
10 Mile	23:39	23:51	0.21	45.2	1.5	6.5	7.83				14		
10 Mile	00:01	00:13	0.20	45.2	1.5	9.1	7.83				13	2	
10 Mile	00:25	00:36	0.19	45.2	0.5	6.4	7.77				4	1	1
10 Mile	00:55	01:11	0.26	45.2	2	7.6	7.46				2		
10 Mile	01:00	01:23	0.39	45.2	0.5	3.5	7.35	NFC					
10 Mile	01:20	01:40	0.33	45.2	0.5	4.4	7.08				5	2	
10 Mile	01:31	01:53	0.38	45.2	1	2	6.88				1	1	
10 Mile	01:38	02:02	0.40	45.2	1	5.5	6.91				16		

Sample Area	Set Time	Pull Time	Duration (hours)	Net Length (m)	Depth In (m)	Depth Out (m)	Water Temp. (°C)	No Fish Captured	Burbot	Longnose Sucker	Lake Trout	Lake Whitefish	Round Whitefish
10 Mile	02:42	02:59	0.28	45.2	1.2	4.9	7.43				1		
Teslin	02:50	03:07	0.28	45.2	1.2	4.4	7.35						1
Teslin	02:54	03:12	0.31	45.2	0.8	10.5	7.32						1
Teslin	02:54	03:12	0.31	45.2	0.8	10.5	7.32				2		
Teslin	03:39	03:59	0.32	45.2	0.6	6.8	7.44	NFC					
Teslin	03:44	04:04	0.34	45.2	0.5	9.8	7.47	NFC					
Teslin	04:19	04:34	0.25	45.2	0	8.5	7.58	NFC					
Teslin	04:24	04:39	0.25	45.2	0.5	9.7	7.54						1
Teslin	04:28	04:44	0.27	45.2	0.2	8.5	7.53	NFC					

Table A2. 2018 fall spawning sampling fish capture data.

Set ID	Fish Number	Species	Tag Status	Tag Number	Tag Colour	Condition	Fork Length (mm)	Sex	Maturity
1	1	Lake Trout				Released	580	Male	Ripe
1	2	Lake Trout				Released	570	Female	Ripe
1	3	Lake Trout				Released	565	Male	Ripe
1	4	Lake Trout				Released	610	Female	Ripe
1	5	Lake Trout	applied	5151	green	Released	580	Male	Ripe
1	6	Lake Trout	applied	5152	green	Released	565	Female	Ripe
1	7	Lake Trout	applied	5153	green	Released	580	Female	Ripe
1	8	Lake Trout	applied	5154	green	Released	540	Male	Ripe
1	9	Lake Trout	applied	5155	green	Released	640	Male	Ripe
1	10	Lake Trout	applied	5156	green	Released	505	Male	Ripe
1	11	Lake Trout	applied	5157	green	Released	595	Female	Ripe
1	12	Lake Trout	applied	5158	green	Released	480	Male	Ripe
1	13	Lake Trout	applied	5159	green	Released	510	Male	Ripe
1	14	Lake Trout	applied	5160	green	Released	510	Male	Ripe
2	15	Lake Trout	applied	5161	green	Released	565	Male	Ripe
2	16	Lake Trout	applied	5162	green	Released	605	Female	Ripe
2	17	Lake Trout	applied	5163	green	Released	545	Male	Ripe
2	18	Lake Trout	applied	5165	green	Released	620	Male	Ripe
2	19	Lake Trout	applied	5166	green	Released	625	Male	Ripe
2	20	Lake Trout	applied	5167	green	Released	480	Male	Ripe
2	21	Lake Trout	applied	5168	green	Released	600	Female	Ripe
2	22	Lake Trout	applied	5169	green	Released	623	Female	Ripe
2	23	Lake Trout	applied	5170	green	Released	580	Male	Ripe
2	24	Lake Trout	applied	5171	green	Released	520	Male	Ripe
2	25	Lake Trout	applied	5172	green	Released	540	Male	Ripe
2	26	Lake Trout	applied	5173	green	Released	610	Male	Ripe
2	27	Lake Trout	applied	5174	green	Released	575	Male	Ripe
2	28	Lake Trout	applied	5175	green	Released	630	Female	Ripe
2	29	Lake Trout	applied	5176	green	Released	626	Female	Ripe
2	30	Lake Trout	applied	5177	green	Released	598	Male	Ripe
2	31	Lake Trout	applied	5178	green	Released	520	Male	Ripe
2	32	Lake Trout	applied	5179	green	Released	548	Male	Ripe
2	33	Lake Trout	applied	5180	green	Released	535	Male	Ripe
2	34	Lake Trout	applied	5181	green	Released	564	Male	Ripe
2	35	Lake Trout	applied	5182	green	Released	473	Male	Ripe
3	36	Lake Trout	applied	5183	green	Released	550	Male	Ripe
3	37	Lake Trout	applied	5184	green	Released	616	Male	Ripe

Set ID	Fish Number	Species	Tag Status	Tag Number	Tag Colour	Condition	Fork Length (mm)	Sex	Maturity
3	38	Lake Trout	applied	5185	green	Released	570	Female	Ripe
3	39	Lake Trout	applied	5186	green	Released	540	Male	Ripe
3	40	Lake Trout	applied	5187	green	Released	595	Male	Ripe
3	41	Lake Trout	applied	5188	green	Released	510	Male	Ripe
3	42	Lake Trout	applied	5189	green	Released	575	Male	Ripe
3	43	Lake Trout	applied	5190	green	Released	550	Male	Ripe
3	44	Lake Trout	applied	5191	green	Released	630	Female	Ripe
3	45	Lake Trout	applied	5192	green	Released	575	Male	Ripe
3	46	Lake Trout	applied	5193	green	Released	585	Male	Ripe
3	47	Lake Trout	applied	5194	green	Released	580	Female	Ripe
3	48	Lake Trout	applied	5195	green	Released	600	Female	Ripe
3	49	Lake Trout	applied	5196	green	Released	580	Female	Ripe
3	50	Lake Trout	applied	5197	green	Released	590	Male	Ripe
3	51	Lake Trout	applied	5198	green	Released	600	Female	Ripe
3	52	Lake Trout	applied	5199	green	Released	485	Male	Ripe
3	53	Lake Trout	applied	5200	green	Released	525	Male	Ripe
3	54	Lake Trout	applied	5201	green	Released	570	Male	Ripe
3	55	Lake Trout	applied	5202	green	Released	585	Male	Ripe
3	56	Lake Trout	applied	5203	green	Released	570	Male	Ripe
3	57	Lake Trout	applied	5204	green	Released	605	Female	Ripe
3	58	Lake Trout	applied	5205	green	Released	570	Male	Ripe
3	59	Lake Trout	applied	5206	green	Released	590	Male	Ripe
3	60	Lake Trout	applied	5207	green	Released	575	Male	Ripe
3	61	Lake Trout	applied	5208	green	Released	560	Male	Ripe
3	62	Lake Trout				Released	520	Male	Ripe
3	63	Lake Trout	recapture	5134	green	Released	580	Male	Ripe
3	64	Lake Trout	recapture	5055	green	Released	573	Male	Ripe
4	65	Lake Trout	applied	5209	green	Released	585	Female	Ripe
4	66	Lake Trout	applied	5210	green	Released	600	Male	Ripe
4	67	Lake Trout	applied	5211	green	Released	597	Female	Ripe
4	68	Lake Trout	applied	5212	green	Released	558	Male	Ripe
4	69	Lake Trout	applied	5213	green	Released	530	Male	Ripe
4	70	Lake Trout	applied	5214	green	Released	597	Female	Ripe
4	71	Lake Trout	applied	5215	green	Released	622	Male	Ripe
4	72	Lake Trout	applied	5216	green	Released	600	Male	Ripe
4	73	Lake Trout	applied	5217	green	Released	565	Male	Ripe
4	74	Lake Trout	applied	5218	green	Released	563	Male	Ripe
4	75	Lake Trout	applied	5219	green	Released	508	Male	Ripe
4	76	Lake Trout	applied	5220	green	Released	554	Male	Ripe

Set ID	Fish Number	Species	Tag Status	Tag Number	Tag Colour	Condition	Fork Length (mm)	Sex	Maturity
4	77	Lake Trout	applied	5222	green	Released	582	Female	Ripe
4	78	Lake Trout	applied	5223	green	Released	530	Male	Ripe
4	79	Lake Trout	applied	5224	green	Released	580	Male	Ripe
4	80	Lake Trout	applied	5225	green	Released	611	Male	Ripe
4	81	Lake Trout	applied	5226	green	Released	560	Male	Ripe
4	82	Lake Trout	applied	5227	green	Released	600	Female	Ripe
4	83	Lake Trout	applied	5228	green	Released	580	Male	Ripe
4	84	Lake Trout	applied	5229	green	Released	544	Male	Ripe
4	85	Lake Trout	applied	5230	green	Released	583	Female	Ripe
4	86	Lake Trout	applied	5231	green	Released	558	Male	Ripe
4	87	Lake Trout	applied	5232	green	Released	572	Female	Ripe
4	88	Lake Trout	applied	5233	green	Released	595	Female	Ripe
4	89	Lake Trout	applied	5234	green	Released	580	Male	Ripe
4	90	Lake Trout	applied	5235	green	Released	511	Male	Ripe
4	91	Lake Trout	applied	5236	green	Released	547	Male	Ripe
4	92	Lake Trout	applied	5237	green	Released	534	Male	Ripe
4	93	Lake Trout				Released	496	Male	Ripe
4	94	Lake Trout				Released	587	Male	Ripe
4	95	Lake Trout	recapture	5044	green	Released	573	Male	Ripe
5	96	Lake Trout	applied	4049	orange	Released	502	Female	Ripe
5	97	Lake Trout	applied	4051	orange	Released	602	Male	Ripe
5	98	Lake Trout	applied	4052	orange	Released	562	Male	Ripe
5	99	Lake Trout	applied	4053	orange	Released	538	Male	Ripe
6	100	Lake Trout	applied	4054	orange	Released	612	Male	Ripe
6	101	Lake Trout	applied	4055	orange	Released	560	Male	Ripe
6	102	Lake Trout	applied	4056	orange	Released	746	Male	Ripe
6	103	Lake Trout	applied	4057	orange	Released	696	Male	Ripe
6	104	Lake Trout	applied	4058	orange	Released	652	Male	Ripe
6	105	Lake Trout	applied	4059	orange	Released	602	Male	Ripe
6	106	Lake Trout	applied	4061	orange	Released	590	Male	Ripe
6	107	Lake Trout	applied	4062	orange	Released	520	Male	Ripe
6	108	Lake Trout	applied	4063	orange	Released	624	Male	Ripe
6	109	Lake Trout	applied	4066	orange	Released	584	Male	Ripe
6	110	Lake Trout	applied	4070	orange	Released	606	Male	Ripe
6	111	Lake Trout	applied	4072	orange	Released	570	Male	Ripe
6	112	Lake Trout	applied	4076	orange	Released	711	Male	Ripe
6	113	Lake Trout	applied	4077	orange	Released	585	Male	Ripe
6	114	Lake Trout	applied	4079	orange	Released	595	Male	Ripe
6	115	Lake Trout	applied	4080	orange	Released	582	Male	Ripe

Set ID	Fish Number	Species	Tag Status	Tag Number	Tag Colour	Condition	Fork Length (mm)	Sex	Maturity
6	116	Lake Trout	applied	4081	orange	Released	580	Male	Ripe
6	117	Lake Trout	applied	4082	orange	Released	449	Male	Ripe
6	118	Lake Trout	applied	4084	orange	Released	678	Male	Ripe
6	119	Lake Trout	applied	4085	orange	Released	600	Male	Ripe
6	120	Lake Trout	applied	4086	orange	Released	618	Male	Ripe
6	121	Lake Trout	applied	4087	orange	Released	502	Male	Ripe
6	122	Lake Trout	applied	4088	orange	Released	635	Male	Ripe
6	123	Lake Trout	applied	4089	orange	Released	685	Male	Ripe
6	124	Lake Trout	applied	4090	orange	Released	604	Male	Ripe
6	125	Lake Trout	applied	4091	orange	Released	595	Male	Ripe
6	126	Lake Trout	applied	4092	orange	Released	527	Male	Ripe
6	127	Lake Trout	applied	4093	orange	Released	740	Male	Ripe
6	136	Burbot				Released	280	Unknown	Unknown
6	143	Lake Trout	applied	4106	orange	Released	515	Female	Ripe
6	144	Lake Trout	applied	4107	orange	Released	525	Male	Ripe
7	128	Lake Trout	applied	4094	orange	Released	560	Male	Ripe
7	129	Lake Trout	applied	4095	orange	Released	509	Male	Ripe
7	130	Lake Trout	applied	4096	orange	Released	633	Male	Ripe
7	131	Lake Trout	applied	4097	orange	Released	630	Male	Ripe
7	132	Lake Trout	applied	4098	orange	Released	570	Male	Ripe
7	133	Lake Trout	applied	4099	orange	Released	490	Male	Ripe
7	134	Lake Trout	applied	4100	orange	Released	589	Male	Ripe
7	135	Round Whitefish				Released	310	Unknown	Unknown
7	137	Lake Trout				Released	618	Male	Ripe
7	138	Lake Trout	applied	4101	orange	Released	541	Male	Ripe
7	139	Lake Trout	applied	4102	orange	Released	538	Male	Ripe
7	140	Lake Trout	applied	4103	orange	Released	676	Male	Ripe
7	141	Lake Trout	applied	4104	orange	Released	551	Male	Ripe
7	142	Lake Trout	applied	4105	orange	Released	520	Male	Ripe
8	145	Lake Trout	applied	4109	orange	Released	565	Male	Ripe
8	146	Lake Trout	applied	4110	orange	Released	562	Male	Ripe
8	147	Lake Trout	applied	4111	orange	Released	675	Male	Ripe
8	148	Lake Trout	applied	4112	orange	Released	462	Male	Ripe
8	149	Lake Trout	applied	4114	orange	Released	540	Male	Ripe
8	150	Lake Trout	applied	4115	orange	Released	516	Male	Ripe
8	151	Lake Trout	applied	4116	orange	Released	508	Male	Ripe
9	152	Round Whitefish				Released	310	Unknown	Unknown
9	153	Lake Trout	applied	4117	orange	Released	530	Male	Ripe
10	154	Lake Whitefish				Released	445	Unknown	Unknown

Set ID	Fish Number	Species	Tag Status	Tag Number	Tag Colour	Condition	Fork Length (mm)	Sex	Maturity
11	155	Longnose Sucker				Released	235	Unknown	Unknown
11	156	Lake Trout				Released	504	Male	Ripe
12	157	Lake Trout				Released	663	Male	Ripe
12	158	Lake Trout				Released	490	Male	Ripe
12	159	Lake Trout				Released	536	Male	Ripe
12	160	Lake Trout				Released	538	Male	Ripe
12	161	Lake Trout				Released	572	Male	Ripe
12	162	Lake Trout				Released	552	Male	Ripe
13	163	Lake Trout				Released	566	Male	Ripe
15	164	Lake Whitefish				Released	480	Unknown	Unknown
15	165	Lake Whitefish				Released	440	Unknown	Unknown
15	166	Round Whitefish				Released	375	Unknown	Unknown
15	167	Lake Trout				Released	611	Male	Ripe
16	168	Lake Trout				Released	522	Male	Ripe
16	169	Lake Trout				Released	590	Male	Ripe
16	170	Lake Trout				Released	540	Male	Ripe
16	171	Lake Trout				Released	518	Male	Ripe
16	172	Lake Trout				Released	611	Male	Ripe
16	173	Lake Trout				Released	570	Male	Ripe
16	174	Lake Trout				Released	550	Male	Ripe
16	175	Lake Trout				Released	508	Male	Ripe
16	176	Lake Trout				Released	556	Male	Ripe
16	177	Lake Trout				Released	545	Male	Ripe
16	178	Lake Trout				Released	594	Male	Ripe
16	179	Lake Trout				Released	563	Male	Ripe
17	180	Lake Trout				Released	544	Male	Ripe
18	181	Lake Trout				Released	539	Male	Ripe
18	182	Lake Trout				Released	628	Male	Ripe
18	183	Lake Trout				Released	650	Male	Ripe
18	184	Lake Trout				Released	576	Male	Ripe
18	185	Lake Trout				Released	550	Male	Ripe
18	186	Lake Trout	recapture	4028	orange	Released	608	Male	Ripe
18	187	Lake Trout				Released	502	Male	Ripe
19	188	Lake Trout				Released	490	Male	Ripe
19	189	Lake Trout				Released	606	Female	Ripe
19	190	Lake Trout				Released	485	Male	Ripe
19	191	Lake Trout				Released	473	Male	Ripe
19	192	Lake Trout				Released	574	Male	Ripe
19	193	Lake Trout				Released	586	Female	Ripe

Set ID	Fish Number	Species	Tag Status	Tag Number	Tag Colour	Condition	Fork Length (mm)	Sex	Maturity
20	194	Lake Trout				Released	510	Male	Ripe
20	195	Lake Trout				Released	502	Male	Ripe
20	196	Lake Trout	recapture	4029	orange	Released	631	Male	Ripe
20	197	Lake Trout	recapture	4028	orange	Released	608	Male	Ripe
20	198	Lake Trout				Released	544	Male	Ripe
20	199	Lake Trout				Released	559	Male	Ripe
21	200	Lake Trout				Released	492	Male	Ripe
21	201	Lake Trout				Released	496	Male	Ripe
21	202	Lake Trout				Released	509	Male	Ripe
21	203	Lake Trout				Released	518	Male	Ripe
21	204	Lake Trout				Released	599	Male	Ripe
21	205	Lake Trout				Released	485	Male	Ripe
21	206	Lake Trout				Released	502	Male	Ripe
21	207	Lake Trout				Released	475	Male	Ripe
22	208	Round Whitefish				Released	365	Unknown	Unknown
22	209	Round Whitefish				Released	340	Unknown	Unknown
22	210	Lake Whitefish				Released	462	Unknown	Unknown
22	211	Lake Trout				Released	520	Female	Ripe
22	212	Lake Trout				Released	594	Female	Ripe
22	213	Lake Trout				Released	497	Male	Ripe
22	214	Lake Trout				Released	480	Male	Ripe
23	215	Lake Whitefish				Released	465	Unknown	Unknown
23	216	Lake Trout				Released	553	Male	Ripe
23	217	Lake Trout				Released	588	Male	Ripe
23	218	Lake Trout				Released	536	Male	Ripe
24	219	Lake Trout				Released	620	Male	Ripe
24	220	Lake Trout				Released	597	Female	Ripe
24	221	Lake Trout				Released	535	Male	Ripe
24	222	Lake Trout				Released	590	Male	Ripe
24	223	Lake Trout				Released	490	Male	Ripe
24	224	Lake Trout				Released	498	Male	Ripe
24	225	Lake Trout				Released	608	Female	Ripe
24	226	Lake Trout				Released	530	Male	Ripe
24	227	Lake Trout				Released	550	Male	Ripe
24	228	Lake Trout				Released	554	Male	Ripe
24	229	Lake Trout				Released	567	Male	Ripe
24	230	Lake Trout				Released	570	Male	Ripe
24	231	Lake Trout				Released	548	Male	Ripe
24	232	Lake Trout				Released	502	Male	Ripe

Set ID	Fish Number	Species	Tag Status	Tag Number	Tag Colour	Condition	Fork Length (mm)	Sex	Maturity
24	233	Lake Trout				Released	445	Male	Ripe
24	234	Lake Trout				Released	573	Male	Ripe
24	235	Lake Trout				Released	598	Male	Ripe
24	236	Lake Trout				Released	506	Male	Ripe
24	237	Lake Trout				Released	522	Male	Ripe
24	238	Lake Trout				Released	595	Male	Ripe
24	239	Lake Trout				Released	658	Male	Ripe
24	240	Lake Trout				Released	513	Male	Ripe
24	241	Lake Trout				Released	530	Male	Ripe
24	242	Lake Trout				Released	552	Female	Ripe
24	243	Lake Trout				Released	610	Male	Ripe
24	242B	Lake Trout				Released	539	Male	Ripe
24	243B	Lake Trout				Released	593	Male	Ripe
24	244	Lake Trout				Released	620	Male	Ripe
24	245	Lake Trout				Released	603	Male	Ripe
24	246	Lake Trout				Released	580	Male	Ripe
24	247	Lake Trout				Released	560	Female	Ripe
24	248	Lake Trout				Released	493	Male	Ripe
24	249	Lake Trout				Released	590	Male	Ripe
25	250	Lake Trout				Released	548	Male	Ripe
25	251	Lake Trout				Released	565	Male	Ripe
25	252	Lake Trout				Released	537	Male	Ripe
25	253	Lake Trout				Released	522	Male	Ripe
25	254	Lake Trout				Released	523	Female	Ripe
25	255	Lake Trout				Released	696	Male	Ripe
25	256	Lake Trout				Released	498	Male	Ripe
25	257	Lake Trout				Released	577	Male	Ripe
25	258	Lake Trout				Released	490	Female	Ripe
25	259	Lake Trout				Released	560	Male	Ripe
25	260	Lake Trout				Released	573	Male	Ripe
25	261	Lake Trout				Released	620	Male	Ripe
25	262	Lake Trout				Released	544	Male	Ripe
25	263	Lake Trout				Released	543	Male	Ripe
26	263B	Lake Trout				Released	641	Male	Ripe
26	264	Lake Trout				Released	602	Male	Ripe
26	265	Lake Trout				Released	591	Male	Ripe
27	266	Lake Trout				Released	627	Male	Ripe
28	267	Round Whitefish				Released	225	Unknown	Unknown
28	268	Round Whitefish				Released	335	Unknown	Unknown

Set ID	Fish Number	Species	Tag Status	Tag Number	Tag Colour	Condition	Fork Length (mm)	Sex	Maturity
28	269	Lake Trout				Killed	555	Male	Ripe
28	270	Lake Whitefish				Released	280	Unknown	Unknown
29	271	Lake Trout				Released	699	Male	Ripe
29	272	Lake Trout				Released	811	Male	Ripe
30	273	Lake Trout				Released	585	Male	Ripe
30	274	Lake Trout				Released	618	Male	Ripe
30	275	Lake Trout				Released	600	Male	Ripe
30	276	Lake Trout				Released	519	Female	Ripe
30	277	Lake Trout				Released	550	Female	Ripe
30	278	Lake Trout				Released	499	Male	Ripe
30	279	Lake Trout				Released	511	Male	Ripe
30	280	Lake Trout				Released	599	Male	Ripe
30	281	Lake Trout				Released	636	Male	Ripe
30	282	Lake Trout				Released	730	Male	Ripe
30	283	Lake Trout				Released	551	Male	Ripe
30	284	Lake Trout				Released	583	Male	Ripe
30	285	Lake Trout				Released	600	Male	Ripe
30	286	Lake Trout				Released	571	Male	Ripe
30	286B	Lake Trout				Released	589	Male	Ripe
30	287	Lake Trout				Released	660	Male	Ripe
30	288	Lake Trout				Released	603	Male	Ripe
30	289	Lake Trout				Released	578	Male	Ripe
30	290	Lake Trout				Released	578	Male	Ripe
30	291	Lake Trout				Released	626	Male	Ripe
30	292	Lake Trout				Released	489	Male	Ripe
30	293	Lake Trout				Released	565	Male	Ripe
30	294	Lake Trout				Released	545	Male	Ripe
30	295	Lake Trout				Released	554	Male	Ripe
30	296	Lake Trout				Released	547	Male	Ripe
30	297	Lake Trout				Released	583	Male	Ripe
30	298	Lake Trout				Released	574	Male	Ripe
31	299	Lake Trout				Released	594	Male	Ripe
31	300	Lake Trout				Released	550	Male	Ripe
31	301	Lake Trout				Released	632	Male	Ripe
31	302	Lake Trout				Released	618	Female	Ripe
32	303	Round Whitefish				Released	319	Unknown	Unknown
32	304	Lake Trout				Released	527	Male	Ripe
32	305	Lake Trout				Released	572	Male	Ripe
32	306	Lake Trout				Released	510	Male	Ripe

Set ID	Fish Number	Species	Tag Status	Tag Number	Tag Colour	Condition	Fork Length (mm)	Sex	Maturity
32	307	Lake Trout				Released	532	Male	Ripe
32	308	Lake Trout				Released	572	Male	Ripe
32	309	Lake Trout				Released	679	Male	Ripe
32	310	Lake Trout				Released	509	Male	Ripe
32	311	Lake Trout				Released	589	Male	Ripe
32	312	Lake Trout				Released	517	Male	Ripe
32	313	Lake Trout				Released	497	Male	Ripe
32	314	Lake Trout				Released	503	Male	Ripe
32	315	Lake Trout				Released	637	Male	Ripe
32	316	Lake Trout				Released	572	Male	Ripe
32	317	Lake Trout				Released	520	Male	Ripe
32	318	Lake Trout				Released	568	Male	Ripe
32	319	Lake Trout				Released	634	Male	Ripe
32	320	Lake Trout				Released	568	Male	Ripe
32	321	Lake Trout				Released	594	Female	Ripe
32	322	Lake Trout				Released	631	Male	Ripe
32	323	Lake Trout				Released	527	Male	Ripe
32	324	Lake Trout				Released	576	Female	Ripe
32	325	Lake Trout	recapture	3045	purple	Released	616	Male	Ripe
32	326	Lake Trout	recapture	3031	purple	Released	594	Male	Ripe
32	327	Lake Trout				Released	648	Male	Ripe
32	328	Lake Trout				Released	608	Male	Ripe
32	329	Lake Trout				Released	895	Female	Ripe
33	330	Lake Whitefish				Released	420	Unknown	Unknown
33	331	Lake Trout				Released	461	Male	Ripe
33	332	Lake Trout				Released	527	Male	Ripe
33	333	Lake Trout				Released	553	Male	Ripe
33	334	Lake Trout				Released	595	Male	Ripe
33	335	Lake Trout				Released	604	Male	Ripe
33	336	Lake Trout				Released	611	Female	Ripe
33	337	Lake Trout				Released	540	Male	Ripe
33	338	Lake Trout				Released	591	Male	Ripe
33	339	Lake Trout				Released	436	Male	Ripe
33	340	Lake Trout				Released	490	Male	Ripe
33	341	Lake Trout				Released	566	Male	Ripe
33	342	Lake Trout				Released	531	Male	Ripe
33	343	Lake Trout				Released	698	Male	Ripe
33	344	Lake Trout				Released	652	Male	Ripe
33	345	Lake Trout				Released	587	Male	Ripe

Set ID	Fish Number	Species	Tag Status	Tag Number	Tag Colour	Condition	Fork Length (mm)	Sex	Maturity
33	346	Lake Trout				Released	592	Male	Ripe
33	347	Lake Trout				Released	519	Male	Ripe
33	348	Lake Trout				Released	513	Male	Ripe
33	349	Lake Trout				Released	539	Male	Ripe
33	350	Lake Trout				Released	530	Male	Ripe
33	351	Lake Trout				Released	582	Male	Ripe
33	352	Lake Trout				Released	630	Male	Ripe
33	353	Lake Trout	recapture	3136	purple	Released	632	Male	Ripe
34	354	Lake Whitefish				Released	425	Unknown	Unknown
34	355	Lake Whitefish				Released	430	Unknown	Unknown
34	356	Lake Trout				Released	590	Male	Ripe
34	357	Lake Trout				Released	558	Male	Ripe
34	358	Lake Trout				Released	646	Male	Ripe
34	359	Lake Trout				Released	548	Male	Ripe
34	360	Lake Trout				Released	574	Male	Ripe
34	361	Lake Trout				Released	559	Male	Ripe
34	362	Lake Trout				Released	629	Male	Ripe
34	363	Lake Trout				Released	523	Male	Ripe
34	364	Lake Trout				Released	533	Female	Ripe
34	365	Lake Trout				Released	544	Male	Ripe
34	366	Lake Trout				Released	627	Male	Ripe
34	367	Lake Trout				Released	542	Male	Ripe
34	368	Lake Trout				Released	568	Male	Ripe
34	369	Lake Trout				Released	620	Male	Ripe
34	370	Lake Trout				Released	541	Male	Ripe
34	371	Lake Trout				Released	647	Male	Ripe
34	372	Lake Trout	recapture	3059	purple	Released	557	Male	Ripe
36	373	Longnose Sucker				Released	241	Unknown	Unknown
36	374	Lake Trout	recapture	2023	white	Released	643	Male	Ripe
36	375	Lake Trout	applied	2032	white	Released	696	Female	Ripe
36	376	Lake Trout	applied	2033	white	Released	741	Male	Ripe
37	376B	Lake Trout	applied	2034	white	Released	623	Male	Ripe
37	338B	Lake Trout	applied	2035	white	Released	573	Male	Ripe
38	339b	Lake Trout	applied	2036	white	Released	603	Male	Ripe
38	340B	Lake Whitefish				Released	288	Unknown	Unknown
39	341B	Round Whitefish				Released	386	Unknown	Unknown
40	342B	Lake Trout	applied	2037	white	Released	562	Male	Ripe
41	343	Lake Trout	recapture	2107	white	Released	681	Female	Ripe
41	344	Lake Trout	applied	2038	white	Released	631	Male	Ripe

Set ID	Fish Number	Species	Tag Status	Tag Number	Tag Colour	Condition	Fork Length (mm)	Sex	Maturity
42	345	Round Whitefish				Released	353	Unknown	Unknown
42	346	Lake Trout	applied	2039	white	Released	520	Male	Ripe
43	347	Lake Trout	applied	2040	white	Released	640	Female	Ripe
43	348	Lake Trout	applied	2041	white	Released	710	Female	Ripe
45	349	Round Whitefish				Released	274	Unknown	Unknown
46	350	Lake Whitefish				Released	440	Unknown	Unknown
46	351	Lake Whitefish				Released	410	Unknown	Unknown
47	352	Round Whitefish				Released	315	Unknown	Unknown
49	353	Lake Trout	applied	2042	white	Released	605	Male	Ripe
49	354	Lake Trout	applied	2043	white	Released	530	Male	Ripe
49	355	Lake Trout	applied	2044	white	Released	656	Male	Ripe
49	356	Lake Trout	applied	2045	white	Released	602	Male	Ripe
49	356	Lake Trout	applied	2046	white	Released	610	Male	Ripe
49	357	Lake Trout	applied	2047	white	Released	623	Male	Ripe
49	358	Lake Trout	applied	2054	white	Released	504	Male	Ripe
49	359	Lake Trout	applied	2048	white	Released	602	Male	Ripe
49	360	Lake Trout	applied	2124	white	Released	709	Male	Ripe
49	361	Lake Trout	applied	2049	white	Released	718	Male	Ripe
50	362	Lake Trout	applied	2050	white	Released	683	Male	Ripe
50	363	Lake Trout	applied	2076	white	Released	645	Male	Ripe
51	364	Lake Trout	applied	2077	white	Released	535	Male	Ripe
52	365	Round Whitefish				Released	407	Unknown	Unknown
52	366	Lake Trout	applied	2078	white	Released	708	Male	Ripe
53	367	Longnose Sucker				Released	210	Unknown	Unknown
53	368	Lake Trout	recapture	2032	white	Released	706	Female	Ripe
54	369	Lake Whitefish				Released	270	Unknown	Unknown
54	370	Round Whitefish				Released	345	Unknown	Unknown
55	371	Lake Trout				Released	310	Unknown	Unknown
55	372	Round Whitefish				Released	395	Unknown	Unknown
55	373	Round Whitefish				Released	370	Unknown	Unknown
56	374	Lake Trout	applied	3301	purple	Released	656	Male	Ripe
56	375	Lake Whitefish				Released	465	Unknown	Unknown
57	376	Lake Trout	applied	3302	purple	Released	568	Female	Ripe
57	377	Lake Trout	applied	3303	purple	Released	563	Male	Ripe
57	378	Lake Trout	applied	3304	purple	Released	488	Male	Ripe
57	379	Lake Trout	applied	3305	purple	Released	586	Male	Ripe
57	380	Lake Trout	applied	3306	purple	Released	548	Male	Ripe
57	381	Lake Trout	applied	3307	purple	Released	562	Male	Ripe
57	382	Lake Trout	recapture	3176	purple	Released	558	Male	Ripe

Set ID	Fish Number	Species	Tag Status	Tag Number	Tag Colour	Condition	Fork Length (mm)	Sex	Maturity
57	383	Lake Trout	applied	3308	purple	Released	860	Male	Ripe
57	384	Lake Trout	applied	3309	purple	Released	790	Male	Ripe
57	385	Lake Trout	applied	3310	purple	Released	599	Male	Ripe
57	386	Lake Trout	applied	3311	purple	Released	630	Male	Ripe
57	387	Lake Trout	applied	3312	purple	Released	555	Male	Ripe
57	388	Lake Trout	applied	3313	purple	Released	590	Male	Ripe
57	389	Lake Trout	applied	3314	purple	Released	516	Male	Ripe
57	390	Lake Trout	applied	3315	purple	Released	535	Male	Ripe
57	391	Lake Trout	applied	3316	purple	Released	538	Male	Ripe
57	392	Lake Trout	applied	3317	purple	Released	655	Male	Ripe
57	393	Lake Trout	applied	3318	purple	Released	452	Male	Ripe
57	394	Lake Trout	applied	3319	purple	Released	587	Male	Ripe
57	395	Lake Trout	applied	3320	purple	Released	655	Male	Ripe
57	396	Lake Trout	applied	3321	purple	Released	565	Male	Ripe
57	397	Lake Trout	applied	3322	purple	Released	605	Male	Ripe
57	398	Lake Trout	applied	3323	purple	Released	550	Male	Ripe
57	399	Lake Trout	recapture	3200	purple	Released	631	Male	Ripe
58	400	Lake Trout	applied	3251	purple	Released	548	Male	Ripe
58	401	Lake Trout	applied	3252	purple	Released	544	Male	Ripe
58	402	Lake Trout	applied	3253	purple	Released	546	Male	Ripe
58	403	Lake Trout	applied	3254	purple	Released	542	Male	Ripe
58	404	Lake Trout	applied	3255	purple	Released	651	Male	Ripe
58	405	Lake Trout	applied	3265	purple	Released	652	Male	Ripe
58	406	Lake Trout	applied	3266	purple	Released	528	Male	Ripe
58	407	Lake Trout	applied	3267	purple	Released	592	Male	Ripe
58	408	Lake Trout	applied	3268	purple	Released	528	Male	Ripe
58	409	Lake Trout	applied	3269	purple	Released	606	Male	Ripe
58	410	Lake Trout	applied	3270	purple	Released	525	Male	Ripe
58	411	Lake Trout	applied	3271	purple	Released	530	Male	Ripe
58	412	Lake Trout	applied	3272	purple	Released	455	Male	Ripe
58	413	Lake Trout	applied	3273	purple	Released	480	Male	Ripe
58	414	Lake Trout	recapture	3166	purple	Released	579	Male	Ripe
59	415	Lake Trout	applied	3274	purple	Released	495	Male	Ripe
59	416	Lake Trout	applied	3275	purple	Released	668	Male	Ripe
59	417	Lake Trout	applied	3276	purple	Released	639	Male	Ripe
59	418	Lake Trout	applied	3277	purple	Released	618	Male	Ripe
59	419	Lake Trout	applied	3278	purple	Released	600	Male	Ripe
59	420	Lake Trout				Released	560	Male	Ripe
59	421	Lake Trout	applied	3279	purple	Released	569	Male	Ripe

Set ID	Fish Number	Species	Tag Status	Tag Number	Tag Colour	Condition	Fork Length (mm)	Sex	Maturity
59	422	Lake Trout	applied	3280	purple	Released	578	Male	Ripe
59	423	Lake Trout	applied	3281	purple	Released	510	Male	Ripe
59	424	Lake Trout	applied	3282	purple	Released	608	Male	Ripe
59	425	Lake Trout	applied	3283	purple	Released	555	Male	Ripe
59	426	Lake Trout	applied	3284	purple	Released	486	Male	Ripe
59	427	Lake Trout	applied	3285	purple	Released	718	Male	Ripe
59	428	Lake Trout	applied	3286	purple	Released	569	Male	Ripe
59	429	Lake Trout	applied	3287	purple	Released	737	Female	Ripe
60	430	Lake Trout	applied	3288	purple	Released	511	Male	Ripe
60	431	Lake Trout	applied	3289	purple	Released	635	Male	Ripe
60	432	Lake Trout	applied	3290	purple	Released	604	Male	Ripe
60	433	Lake Trout	applied	3291	purple	Released	604	Male	Ripe
60	434	Lake Trout	applied	3292	purple	Released	618	Male	Ripe
60	435	Lake Trout	applied	3293	purple	Released	511	Male	Ripe
60	436	Lake Trout	applied	3294	purple	Released	738	Male	Ripe
65	500	Lake Trout	applied	167	yellow	Released	523	Male	Ripe
65	501	Lake Trout	applied	168	yellow	Released	675	Male	Ripe
65	502	Lake Trout	applied	169	yellow	Released	609	Male	Ripe
67	503	Lake Trout	applied	170	yellow	Released	558	Male	Ripe
67	504	Lake Trout	applied	171	yellow	Released	670	Male	Ripe
68	505	Lake Trout	applied	172	yellow	Released	682	Female	Ripe
68	506	Lake Trout	applied	173	yellow	Released	592	Male	Ripe
68	507	Lake Trout	applied	174	yellow	Released	802	Male	Ripe
69	508	Lake Trout	applied	175	yellow	Released	584	Male	Ripe
73	509	Lake Trout	applied	176	yellow	Released	658	Male	Ripe
73	510	Lake Trout	applied	177	yellow	Released	653	Male	Ripe
73	511	Lake Trout	recapture	128	yellow	Released	710	Male	Ripe
73	512	Round Whitefish				Released	360	Unknown	Unknown
74	513	Lake Trout	applied	178	yellow	Released	614	Male	Ripe
74	514	Lake Trout	applied	179	yellow	Released	625	Male	Ripe
74	515	Lake Trout	recapture	3	yellow	Released	719	Male	Ripe
74	516	Lake Trout	applied	180	yellow	Released	728	Male	Ripe
74	517	Lake Trout	recapture	118	yellow	Released	567	Male	Ripe
74	518	Lake Trout	applied	181	yellow	Released	697	Male	Ripe
74	519	Lake Trout	recapture	12	yellow	Released	630	Male	Ripe
74	520	Lake Trout	applied	182	yellow	Released	529	Female	Ripe
74	521	Round Whitefish				Released	380	Unknown	Unknown
74	522	Lake Trout	applied	183	yellow	Released	648	Female	Ripe
74	523	Lake Trout	applied	184	yellow	Released	651	Male	Ripe

Set ID	Fish Number	Species	Tag Status	Tag Number	Tag Colour	Condition	Fork Length (mm)	Sex	Maturity
74	524	Lake Trout	applied	185	yellow	Released	606	Male	Ripe
74	525	Lake Trout	applied	186	yellow	Released	757	Female	Ripe
74	526	Lake Trout	applied	187	yellow	Released	605	Male	Ripe
74	527	Lake Trout	applied	188	yellow	Released	599	Male	Ripe
75	528	Lake Trout	recapture	4	yellow	Released	714	Male	Ripe
75	529	Lake Trout	applied	189	yellow	Released	600	Female	Ripe
76	530	Lake Trout	applied	190	yellow	Released	655	Male	Ripe
76	531	Lake Trout	applied	191	yellow	Released	605	Male	Ripe
76	532	Lake Trout	applied	192	yellow	Released	678	Male	Ripe
76	533	Lake Trout	applied	193	yellow	Released	650	Male	Ripe
76	534	Lake Trout	applied	194	yellow	Released	591	Male	Ripe
76	535	Lake Trout	applied	195	yellow	Released	508	Male	Ripe
76	536	Lake Trout	applied	196	yellow	Released	595	Male	Ripe
76	537	Lake Trout	applied	197	yellow	Released	654	Male	Ripe
76	538	Lake Trout	applied	198	yellow	Released	706	Male	Ripe
76	539	Lake Trout	applied	199	yellow	Released	558	Male	Ripe
76	540	Lake Trout	applied	200	yellow	Released	703	Male	Ripe
76	541	Lake Trout	recapture	51	yellow	Released	658	Male	Ripe
76	542	Lake Trout	recapture	142	yellow	Released	650	Male	Ripe
76	543	Lake Trout	recapture	55	yellow	Released	629	Male	Ripe
77	544	Lake Whitefish				Released	343	Unknown	Unknown
77	545	Lake Whitefish				Released	395	Unknown	Unknown
77	546	Lake Trout	applied	201	yellow	Released	603	Male	Ripe
77	547	Lake Trout	applied	202	yellow	Released	600	Male	Ripe
77	548	Lake Trout	applied	203	yellow	Released	618	Male	Ripe
77	549	Lake Trout	applied	204	yellow	Released	688	Male	Ripe
77	550	Lake Trout	applied	205	yellow	Released	835	Male	Ripe
77	551	Lake Trout	applied	206	yellow	Released	574	Male	Ripe
77	552	Lake Trout	applied	207	yellow	Released	602	Male	Ripe
77	553	Lake Trout	applied	208	yellow	Released	621	Female	Ripe
77	554	Lake Trout	applied	209	yellow	Released	534	Male	Ripe
77	555	Lake Trout	applied	210	yellow	Released	575	Male	Ripe
77	556	Lake Trout	applied	211	yellow	Released	714	Male	Ripe
77	557	Lake Trout	recapture	39	yellow	Released	585	Male	Ripe
77	558	Lake Trout	recapture	40	yellow	Released	589	Male	Ripe
78	559	Round Whitefish				Released	335	Unknown	Unknown
78	560	Lake Trout	applied	212	yellow	Released	538	Male	Ripe
78	561	Lake Whitefish				Released	410	Unknown	Unknown
78	562	Lake Trout	applied	213	yellow	Released	615	Male	Ripe

Set ID	Fish Number	Species	Tag Status	Tag Number	Tag Colour	Condition	Fork Length (mm)	Sex	Maturity
78	563	Lake Trout	applied	214	yellow	Released	568	Male	Ripe
78	564	Lake Trout	applied	215	yellow	Released	700	Male	Ripe
79	565	Lake Trout	applied	216	yellow	Released	526	Male	Ripe
79	566	Lake Trout	applied	217	yellow	Released	602	Female	Ripe
81	567	Lake Whitefish				Released	420	Unknown	Unknown
81	568	Lake Whitefish				Released	455	Unknown	Unknown
81	569	Lake Trout	applied	218	yellow	Released	612	Male	Ripe
81	570	Lake Trout	applied	219	yellow	Released	538	Male	Ripe
81	571	Lake Trout	applied	220	yellow	Released	805	Female	Ripe
81	572	Lake Trout	applied	221	yellow	Released	679	Male	Ripe
81	573	Lake Trout	applied	223	yellow	Released	865	Male	Ripe
82	574	Lake Trout	recapture	95	yellow	Released	638	Male	Ripe
82	575	Lake Whitefish				Released	430	Unknown	Unknown
83	576	Lake Trout	applied	225	yellow	Released	540	Male	Ripe
83	577	Lake Trout	applied	227	yellow	Released	580	Male	Ripe
83	578	Lake Trout	applied	231	yellow	Released	649	Male	Ripe
83	579	Lake Trout	recapture	158	yellow	Released	632	Male	Ripe
83	580	Lake Trout	applied	232	yellow	Released	719	Female	Ripe
83	581	Lake Trout	applied	233	yellow	Released	828	Male	Ripe
83	582	Lake Trout	applied	234	yellow	Released	805	Male	Ripe
83	583	Lake Trout	applied	235	yellow	Released	690	Female	Ripe
83	584	Lake Trout	applied	236	yellow	Released	560	Male	Ripe
83	585	Lake Trout	applied	237	yellow	Released	748	Male	Ripe
83	586	Lake Trout	applied	238	yellow	Released	521	Male	Ripe
83	587	Lake Trout	applied	239	yellow	Released	592	Male	Ripe
83	588	Lake Trout	applied	240	yellow	Released	560	Male	Ripe
83	589	Lake Trout	recapture	86	yellow	Released	711	Male	Ripe
83	590	Lake Trout	recapture	62	yellow	Released	594	Male	Ripe
83	591	Lake Trout	recapture	68	yellow	Released	677	Male	Ripe
84	592	Lake Trout	recapture	1001	blue	Released	660	Male	Ripe
85	593	Round Whitefish				Released	305	Unknown	Unknown
86	594	Round Whitefish				Released	260	Unknown	Unknown
86	595	Lake Trout	applied	1069	blue	Released	865	Male	Ripe
86	596	Lake Trout	applied	1068	blue	Released	568	Male	Ripe
90	597	Round Whitefish				Released	295	Unknown	Unknown